

Durham E-Theses

Agricultural wage labour in fifteenth-century England

LIU, GERALD

How to cite:

LIU, GERALD (2012) *Agricultural wage labour in fifteenth-century England*, Durham theses, Durham University. Available at Durham E-Theses Online: <http://etheses.dur.ac.uk/3353/>

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a [link](#) is made to the metadata record in Durham E-Theses
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full Durham E-Theses policy](#) for further details.

Dissertation title

Agricultural wage labour in fifteenth-century England

Gerald Liu

PhD degree

History Department

University of Durham

2012

This dissertation is researching the employment of different types of agricultural labourer in the ending phase of the middle ages. The purpose is to question the method of using casual wage evidence to interpret changes in the labourer's income in the current study of late medieval economic history. My criticism of the traditional method is that, since casual wage evidence is composed of the price of finishing a piece of work, it is inappropriate to use that evidence to interpret incomes without the information of how many pieces of work done by the labourer. The said information is, indeed, mostly unavailable. My proposition to solve this problem is to use the salaries paid to the permanent farm worker, who was hired by year. The approach of this research is, firstly, to demonstrate the limitations of the traditional method and, secondly, to demonstrate that the salary paid to the permanent worker is a useful tool for understanding the changes in the labourer's income. In particular, the discussion is separated into five chapters. At first, I intend to illustrate that casual wage evidence illustrates only one aspect of the fifteenth-century agricultural labour market and that from the same source material more information apart from wage data is available and allows us to examine other aspects of wage labour. With the information, I shall argue that job opportunities in the casual sector were limited by farming seasons; and that, except for a few villagers, casual employment only accounted for a minor part of the yearly income. It shall be illustrated that apart from casual labourers, the manorial demesne employed the other two types of labourers, who were potentially more important than casual labourers in terms of the cost and the labour input. Between the two, labour services were persistently employed, but their importance were dwindling, whilst the permanent workers were the main labour force purposely maintained on the demesne. This finding proves that the employment of casual labour was relatively insignificant. It also illustrates that the permanent posts were a more secure source of income than casual hire. In this context, casual hire was paid higher daily wages, but its availability was limited; the permanent contract was poorly paid, but it guaranteed a secure livelihood across the year. This explains why, when job opportunities were relatively expanded in the casual sector during labour shortage, labourers would turn down permanent contracts for casual hire, in the hope for a better income. Following this context, we would expect to see that during our period, when depopulation was continued, the employer of permanent workers was forced to improve the job offer to match the potential income a labourer could earn in the casual sector. The trend in the value of the permanent labourer's salary, therefore, should reflect the changes in the agricultural labourer's income in general. An index of the permanent labourer's salary will be presented to illustrate this rising trend.

Table of Contents

| | |
|--|-------|
| Chapter 1 Introduction | p.1 |
| 1.1 Literature Review | p.2 |
| 1.2 Fifteenth-century English agriculture and the questions of interest..... | p.12 |
| Chapter 2 Agricultural labour in fifteenth-century manorial accounts | p.28 |
| 2.1 Overview of the sample..... | p.32 |
| 2.2 Elements of wage labour in the manorial account..... | p.51 |
| 2.3 The demand-side of the agricultural labour market..... | p.72 |
| 2.4 Conclusion..... | p.87 |
| Chapter 3 Seasonality of agricultural casual labour..... | p.91 |
| 3.1 Reconstruction of a fifteenth-century farming calendar..... | p.95 |
| 3.2 The uneven demand in agricultural labour markets during the year | p.105 |
| 3.3 The comparative importance of agricultural casual labour..... | p.117 |
| 3.4 Conclusion..... | p.131 |
| Chapter 4 The influence of labour services on fifteenth-century agricultural wage labour..... | p.135 |
| 4.1 The formation of customary labour in fifteenth century seigniorial agriculture..... | p.139 |
| 4.2 The significance of customary labour in fifteenth-century demesne farming..... | p.154 |
| 4.3 The financial impact of the abandonment of labour services on the manorial demesne..... | p.166 |
| 4.4 Conclusion..... | p.176 |
| Chapter 5 The <i>famuli</i> in fifteenth-century English agriculture..... | p.180 |
| 5.1 The terms of employment of the fifteenth-century <i>famuli</i> | p.184 |
| 5.2 The comparative importance of the <i>famuli</i> | p.202 |
| 5.3 Collaboration between the <i>famuli</i> and casual labourers..... | p.215 |
| 5.4 Conclusion..... | p.227 |
| Chapter 6 Divergent movements in fifteenth-century English agricultural wages..... | p.231 |
| 6.1 Limitations of casual wage evidence..... | p.238 |
| 6.2 Remuneration of the <i>famuli</i> | p.259 |
| 6.3 Socio-economic implications of the divergences..... | p.279 |
| 6.4 Conclusion..... | p.295 |
| Chapter 7 Conclusion..... | p.300 |
| Appendix 1 Labour cost in three major seasonal operations..... | p.315 |
| Appendix 2 The value of the salary package on the Pittington manorial demesne, Durham, 1390-1460..... | p.316 |

| | |
|---|-------|
| Appendix 3 The value of the salary package on the Lullington manorial demesne, East Sussex, 1410-1430..... | p.318 |
| Bibliography..... | p.319 |

List of charts

| | | |
|-----------|--|-------|
| Chart 1.1 | Farmer's indices of CPI and money wage rates, 1350-1460..... | p.15 |
| Chart 2.1 | A comparison between the sown acreage and the harvest acreage on the Ebbesbourne demesne, Wiltshire..... | p.66 |
| Chart 2.2 | Patterns of composition of the workforce in threshing and in the Harvest..... | p.75 |
| Chart 2.3 | The cost of labour in the three seasonal operations on the Elvethall manorial demesne, Durham, 1420-1500..... | p.81 |
| Chart 2.4 | The demand curve of employment of casual labour..... | p.83 |
| Chart 2.5 | The movements in the wage rates in the harvest and in threshing, 1300-1450..... | p.85 |
| Chart 3.1 | A. V. Chayanov's Chart of Distribution of work by half-monthly Periods..... | p.93 |
| Chart 3.2 | The monthly cost of labour on the Ebbesbourne demesne, Wiltshire, 1438/9..... | p.115 |
| Chart 3.3 | The patterns of the monthly cost of labour in the fifteenth century | p.120 |
| Chart 4.1 | The distribution of the harvest labour on the Longbridge Deverill demesne, Wiltshire, 1420-1480..... | p.142 |
| Chart 4.2 | The distribution of customary labour in the harvest on the Longbridge Deverill demesne, Wiltshire, 1420-1480..... | p.143 |
| Chart 4.3 | The distribution of the harvest labour on the Woolstone demesne, Berkshire, 1400-1470..... | p.148 |
| Chart 4.4 | The importance of labour service in comparison with casual labourers in the harvest on selected manorial demesnes during the fifteenth century..... | p.153 |
| Chart 4.5 | The comparative importance between customary labour and casual labour in the harvest in the early fifteenth century..... | p.161 |
| Chart 4.6 | Distribution of work on the Ebbesbourne demesne before and after c. 1441..... | p.170 |
| Chart 4.7 | The percentage of the harvest work done by customary labourers before and after the abandonment of labour services, in addition to the change in the cost of harvest labour..... | p.173 |
| Chart 5.1 | The arrangement of the harvest labour on the Alciston manorial demesne, Sussex, 1400-1500..... | p.200 |
| Chart 5.2 | The comparative cost of hiring the <i>famuli</i> and hiring casual labourers on the Alciston manorial demesne, Sussex, 1400-1500 | p.210 |
| Chart 5.3 | The comparative cost of hiring the <i>famuli</i> and hiring casual | |

| | | |
|------------|--|-------|
| | labourers on the Ebbesbourne demesne, Wiltshire, 1400-1500.... | p.211 |
| Chart 5.4 | The sown acreage on the Monkton Deverill demesne, Wiltshire, 1400-1500..... | p.220 |
| Chart 6.1 | Farmer's consumer price index and agricultural wage rate index, 1350-1500..... | p.233 |
| Chart 6.2 | The index of real wage rates calculated of D. Farmer's wage and price series..... | p.234 |
| Chart 6.3 | The indices of money wage rates in seasonal operations, 1350-1460..... | p.240 |
| Chart 6.4 | The threshing wage rates on the Elvethall manorial demesne, Durham, 1400-1500..... | p.242 |
| Chart 6.5 | The threshing and reaping wage rates on the Overton manorial demesne, Hampshire, 1400-1460..... | p.243 |
| Chart 6.6 | The threshing wage rates on the Ormesby St Margaret manorial demesne, Norfolk, 1420-1460..... | p.244 |
| Chart 6.7 | The threshing wage rates on the Longbridge Deverill manorial demesne, Wiltshire, 1420-1480..... | p.245 |
| Chart 6.8 | The harvest wage on the Ebbesbourne manorial demesne, Wiltshire, 1400-1460..... | p.253 |
| Chart 6.9 | The trend in stipends on the Pittington, Durham, and on the Ebbesbourne, Wiltshire, manorial demesnes, 1400-1450..... | p.270 |
| Chart 6.10 | The index of stipend paid to the <i>famulus</i> over the fifteenth century..... | p.275 |
| Chart 6.11 | The index of <i>famulus</i> 's salary package calculated in cash over the fifteenth century..... | p.276 |
| Chart 6.12 | The index of the <i>famulus</i> 's income calculated in grain over the fifteenth century..... | p.277 |
| Chart 6.13 | Divergent movements between the casual wage rate and the stipend of the <i>famuli</i> in fifteenth-century England..... | p.280 |
| Chart 6.14 | The comparison between the trends in the purchasing power of the <i>famulus</i> 's salary and of the casual wage rate..... | p.283 |
| Chart 6.15 | The cash values of the salary package on the Pittington manorial demesne, Durham, 1390-1460..... | p.288 |
| Chart 6.16 | Values of the salary package on the Lullington manorial demesne, East Sussex, 1410-1430..... | p.289 |
| Chart 7.1 | The monthly cost of labour in main farming operations on the Ebbesbourne demesne, 1400-1454..... | p.311 |

List of tables

| | | |
|-----------|---|-------|
| Table 2.1 | The list of series of fifteenth-century manorial account rolls..... | p.38 |
| Table 2.2 | The manorial account roll of Elvethall, Durham, 1447/8..... | p.51 |
| Table 2.3 | The sub-task wage rates of the threshing operation..... | p.58 |
| Table 2.4 | The record of the harvest labour on the Ormesby St Margaret demesne, Norfolk, 1434/5..... | p.59 |
| Table 2.5 | The use of casual labour in threshing on the Elvethall demesne, Durham..... | p.62 |
| Table 2.6 | The use of casual labour in the harvest at Pittington and Ebbesbourne..... | p.63 |
| Table 3.1 | A calendar of traditional operations in pre-mechanised English Agriculture..... | p.99 |
| Table 3.2 | A calendar of fifteenth-century English agriculture..... | p.104 |
| Table 3.3 | The cost of labour in the weeding and mowing operations..... | p.113 |
| Table 3.4 | The composition of the harvest workforce on the Ormesby St Margaret demesne, Norfolk..... | p.124 |
| Table 4.1 | Labour services on the Werrington demesne, Cornwall..... | p.156 |
| Table 5.1 | The composition of the <i>famuli</i> on the Alciston demesne, Sussex, 1449, and on the Ebbesbourne demesne, Wiltshire, 1449..... | p.187 |
| Table 5.2 | The average labour input of the plough-team without fallow-ploughing..... | p.196 |
| Table 5.3 | Comparative demesne labour input..... | p.206 |
| Table 5.4 | Comparison between the daily wage of the <i>famulus</i> and the casual labourer..... | p.214 |
| Table 5.5 | The work distribution in seasonal operations at Monkton Deverill | p.222 |
| Table 5.6 | The cost of labour per acre on the Monkton Deverill demesne 1451-1460..... | p.224 |
| Table 5.7 | The cost of labour per acre on the Monkton Deverill demesne 1400-1427..... | p.225 |
| Table 6.1 | The pay and workers on the Pittington demesne, Durham..... | p.250 |
| Table 6.2 | The composition of the harvest wage in the fifteenth century..... | p.251 |
| Table 6.3 | The value of the harvest meal at Ormesby St Margaret..... | p.256 |
| Table 6.4 | The harvest labour arrangement on the Catesby demesne, Berkshire, 1449..... | p.257 |
| Table 6.5 | The stipend given to the <i>famuli</i> on the Ormesby St Margaret demesne, Norfolk..... | p.264 |
| Table 6.6 | Salary package of the ploughman and shepherd at Alciston, | |

| | | |
|------------|---|-------|
| | East Sussex..... | p.268 |
| Table 6.7 | Ploughmen and shepherds and their salaries in the fifteenth Century..... | p.269 |
| Table 6.8 | The grain delivery given to the ordinary <i>famuli</i> | p.272 |
| Table 6.9 | Wage regulations related to the <i>famuli</i> | p.280 |
| Table 6.10 | Harvest contract labourers' wages on the Ormesby St Margaret demesne, Norfolk, 1425..... | p.294 |

List of maps

| | | |
|---------|--|-------|
| Map 2.1 | Sample manorial demesnes..... | p. 40 |
| Map 3.1 | Proportion of the harvest work done by casual labourers..... | p.109 |
| Map 3.2 | Proportion of the threshing work done by casual labourers..... | p.110 |

Chapter 1 Introduction

In the period when agriculture dominated almost every aspect of daily life, the lords and wealthy peasants relied on paid labourers for farming business, yardlanders hired labourers to work with them, whilst moderate and landless villagers worked for hire. Agrarian wage labour is a window on the economy as well as on agricultural society. Following the aftermath of the Black Death and sequential outbreaks of plague, the labour market of the fifteenth century is described as having undergone dire labour shortage that raised the wage rate to a record high level until the nineteenth century.¹ Historians suggest that the high price of labour created a golden age of labour during the fifteenth century, that the high price level suffocated demesne farming, and that fierce competition for labour in the early market economy finished off the feudal mode of production. For many decades, this fancy historical jigsaw of late medieval wage labour has been put together piece by piece, roughly following the context that the high wage rate dominated the fifteenth-century socio-economic life in the country. However, the wage data only account for a sector of agrarian labourers, that is, casual labourers, and historians need to ask whether casual labour evidence is an appropriate proxy for understanding fifteenth-century agricultural wage labour.

¹ G. Clark, 'The long march of history: farm wages, population, and economic growth, England 1209-1869', *Economic History Review*, 2nd ser., 60 (2007), pp. 97-135.

1.1 Literature Review

The term ‘wage labour’ conceives labour-power as a commodity, naturally born with the worker. The worker can sell it like selling ordinary commodities to exchange for essentials, luxuries, or any purchasable thing or service. In agriculture, like in an industry, the worker is the seller of labour-power and the employer buys. Only within this relationship the worker earns his livelihood and the employer keeps on producing. By considering labour-power as another sort of ordinary commodity, its price should represent the balance of supply and demand, as it determines the worker’s welfare and forms a capital expenditure of the employer.² On this basis, the price of labour-power is accepted by economic historians to be an indicator of the labourer’s living standard and a proxy for understanding the employer’s financial condition. Nevertheless, when the concept of wage labour is used in understanding medieval agricultural labour, it becomes problematic in the existing studies.

It is known that agriculture has two rather different labour markets. The casual labour market appears periodically for supplying seasonal operations; the permanent labour market is rendered on a yearly basis supplying the employer with the workers that take care of regular farming activities. Between the two, the casual labour market

² K. Marx and F. Engels (ed. and trans.), *Wage labour and capital, the original 1891 pamphlet* (Marx/Engels Internet Archive), pp. 3, 8-13, <http://www.marxists.org/archive/marx/works/download/pdf/wage-labour-capital.pdf>; K. Marx, S. Moore (trans.), E. Aveling (trans.) and F. Engels (ed.), *Capital, vol. 1, First English edition of 1887* (Marx/Engels Internet Archive), pp. 373-389, <http://www.marxists.org/archive/marx/works/download/pdf/Capital-Volume-I.pdf>.

behaves within a range of natural and institutional limits, especially in the medieval socio-economic context. In consulting existing studies I was struck by the doubtful concentration on casual labour evidence in the interpretation of medieval agricultural, and economic, events. This concentration, as this dissertation intends to present, is the root of the problem.

This concentration on casual labour evidence has inspired as many brilliant ideas as criticisms. For many generations, economic historians have assembled a colossal body of casual wage data, made them into wage series, and integrated them with price data.³ These wage data have established an evidential basis for interpreting the medieval economy. J. E. Thorold Rogers observed that over the fifteenth century ‘at no time were wages so high, and at no time was food so cheap’; and indicated that the fifteenth century was ‘the golden age of the English labourer’.⁴ M. M. Postan introduced the idea of ‘how much wheat could be bought by one day’s wage’ to explain the falling trend in population.⁵ Many other historians have used the wage

³ J. E. Thorold Rogers, *A history of agriculture and prices in England*, v. 1-7 (1866-1902); W. Beveridge, ‘Wages in the Winchester manors’, *Economic History Review*, 2nd ser., 7 (1936), pp. 22-43; idem, ‘Westminster wages in the manorial era’, *Economic History Review*, 2nd ser., 8 (1955), pp. 18-35; E. H. Phelps-Brown and S. Hopkins, ‘Seven centuries of building wages’, *Economica*, 22 (1955), pp. 195-206; idem, ‘Seven centuries of the prices of consumables, compared with builders’ wage rates’, *Economica*, 23 (1956), pp. 296-314. D. L. Farmer, ‘Prices and wages, 1042-1350’, in H. E. Hallam (ed.), *The agrarian history of England and Wales*, vol. 2 (Cambridge, 1988), pp. 715-817; idem, ‘Prices and wages, 1350-1500’, in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 431-525.

⁴ J. E. Thorold Rogers, *Six centuries of work and wages: the history of English labour* (London, 1884), p. 44; idem, *The economic interpretation of history* (London, 1902), p. 325; modern support to this point is found in Clark, ‘The long march of history’, pp. 103-104.

⁵ M. M. Postan, ‘Some economic evidence of declining population in the later middle ages’, *Economic History Review*, 2nd ser., 2 (1950), pp. 225-229.

series to summarise economic events.⁶ Nevertheless, A. R. Bridbury doubted the wage series' capability of presenting details of the post-Black Death economy.⁷ B. F. Harvey has remarked that the wage series could be a fallible guide for short periods because they give no indication of individual economic events.⁸ J. Hatcher has suggested that, because the wage series fail to illustrate the increased living standard that is presented in literary materials, the wage series have possibly been manipulated by medieval accountants to avoid wage regulations.⁹ In this controversy, the evidential basis composed of casual wage data is the centre. In order to identify the problems, it might be worth taking a close look at existing studies.

The use of wage evidence has its origin in the nineteenth century, when casual wage data were collected from manorial account rolls for a purpose that was different from the modern understanding of wage series. When Thorold Rogers started publishing wage data, there was no comparable work and manorial account rolls had just started attracting historical attention. For Thorold Rogers the wage data were collected to question the rose-tinted Romantic image of medieval history. He argued that the joyful impression of peasant manumission in the late middle ages conceived by nineteenth-century historians using legal evidence failed to account for the late

⁶ B. M. S. Campbell, *English seigniorial agriculture 1250-1450* (Cambridge, 2000), pp. 3-10.

⁷ A. R. Bridbury, 'The Black Death', *Economic History Review*, 2nd ser., 26 (1973), pp. 577-578.

⁸ B. F. Harvey, 'Introduction: the "crisis" of the early fourteenth century', in B. M. S. Campbell (ed.), *Before the Black Death: studies in the 'crisis' of the early fourteenth century* (Manchester and New York, 1991), p. 6.

⁹ J. Hatcher, 'England in the aftermath of the Black Death', *Past & Present*, 144 (1994), pp. 3-35.

medieval recession.¹⁰ Thorold Rogers was starting a research method with direct evidence in opposition to the contemporary methodology, like in his comment: ‘any theory of political economy which does not take facts into account is pretty sure to land the student in practical fallacies of the grossest, and in the hands of ignorant, but influential people, of the most mischievous kind.’¹¹ The collection of medieval wage data was continued and expanded by W. Beveridge in the early twentieth century.¹² At this early stage, wage data provided a straightforward understanding of the rise and fall in medieval casual wage rates, whilst forming a ready platform for sophisticated interpretations.

The building of theoretical frameworks by means of casual wage data is a mid-twentieth-century development, which was firstly intended to illustrate the trend in population. In 1950 Postan established an example of using the law of supply and demand through wage data to demonstrate the shortened supply of labour in the late middle ages; and used it as a proxy for the demographic change. Based on the basic economic law, this theory predicts that when labour power is in short supply, its price rises, as during depopulation; in the meanwhile the lack of buyers in the market of other commodities lowered the price level of them; the comparative value between the

¹⁰ Thorold Rogers, *Six centuries*, p. 44; idem, *The economic interpretation of history* (London, 1902), pp. 4, 42, 45-48.

¹¹ Thorold Rogers, *Six centuries*, pp. vi, 2.

¹² Beveridge, ‘Westminster wages’, p. 22; Beveridge, ‘Winchester manors’, pp. 38-42; the rest of the data are kept at British Library of Political and Economic Science, LSE.

wage rate and the price level illustrates how resources (i.e. commodities in general) were shared by the population. In his theoretical framework, the rising trend in the purchasing power of one day's wage since c. 1300 represents that the relative value of labour-power was rising, as a result of long-term depopulation.¹³ Expanded studies were made from this framework to study the changes in population and to investigate the quality of soil that is believed to have been derogated by heavy exploitation due to overpopulation and recovered when the population fell.¹⁴ Postan has thus explained the economy after the Black Death: 'While the values of land were falling, the values of men were rising'.¹⁵ This argument finds strong support in post-Black Death legislation and in chronicles.¹⁶ This framework remained to be strong and was further elaborated by D. L. Farmer's work on casual wage and price data.¹⁷

Thorold Rogers's and Postan's studies provided grounds for conceiving the trend in the labourer's living standard. The divergence between the rise in wage rates and the fall in price levels in the late middle age is stark. The amount of agricultural work

¹³ Postan, 'Some economic evidence', pp. 225-229. The change in labour productivity is a vulgar expression of the economic law of diminishing returns. Theoretically, when the fixed resource was shared by a high population, each person's share was small. Thus, in c. 1300, the average labour productivity should be low because of the highest English population in the middle ages. When the population was reduced, especially after the Black Death, the same resource was shared by a smaller population. The average labour productivity was therefore higher. J. Hatcher, *Plague, population and the English economy 1348-1530* (London, 1977), p. 50. See, K. G. Persson, 'Labour productivity in medieval agriculture: Tuscany and the Low Countries', in B. M. S. Campbell and M. Overton (eds), *Land, labour and livestock: historical studies in European agricultural productivity* (Manchester and New York, 1991), p. 125; Clark, 'The long march of history', p. 105.

¹⁴ The studies are many. Early attempts were mainly contributed by Titow. For example, M. M. Postan and J. Z. Titow, 'Heriots and prices on Winchester manors,' *Economic History Review*, 2nd ser., 11 (1959), pp. 392-411; J. Z. Titow, *Winchester yields: a study in medieval agricultural productivity* (Cambridge, 1972).

¹⁵ M. M., Postan, *The medieval economy and society: an economic history of Britain in the middle ages* (Harmondsworth and New York, 1972), pp. 40.

¹⁶ R. B. Dobson (ed.), *The Peasants' Revolt of 1381* (London, 1983), pp. 59-63.

¹⁷ Farmer, 'Prices and wages, 1042-1350', pp. 715-817; idem, 'Prices and wages, 1350-1500', pp. 431-525.

required to buy a certain commodity fell. Because labour-power is the means for the labourer to maintain himself, the rise in the comparative value of labour-power should result in melioration of the labourer's living standard. Farmer agreed that as far as one can tell, after the Black Death, labour shortage made it easier for the labourer to earn a livelihood in agricultural employment. However, he was conservative about the claim that the wage had a direct connection with the labourer's living standard.¹⁸ Frankly, the source material (i.e. manorial accounts), whilst keeping the record of wage rates, does not explain how many units of labour-power were sold by the worker; therefore there is no information of how much the worker had earned. C. Dyer and S. A. C. Penn have expressed the same doubt and indicated 'we may get the information of a particular wage rate in a particular job and term, but we are in ignorance about the man's work for the rest of the year'. The casual wage data are a 'beginning of a new stage of investigation', rather than an indicator of the labourer's living standard.¹⁹

Hatcher has confirmed a similar problem by indicating that the purchasing power of the wage rate did not improve promptly during labour shortage. On the one hand, according to Farmer's statistics, the purchasing power of the wage rate did not rise in the wake of the Black Death. On the other, contemporary literature is full of reports of the popular demand for quality food and clothing among working classes, which

¹⁸ Farmer, 'Prices and wages, 1350-1500', pp. 490-494.

¹⁹ C. Dyer and S. A. C. Penn, 'Wages and earnings in late medieval England: evidence from the enforcement of the Labour Laws', *Economic History Review*, 2nd ser., 43 (1990), pp. 357, 372.

obscured the identities between classes, enjoyed by peasants; and the legal documents demonstrate the demanding attitude of labourers in the job negotiation. Based on this observation, Hatcher argues that the wage data were problematic in representing the labourer's living standard. He offers two possible reasons to explain the problems of wage data. First, medieval manorial accountants might have circumvented records to avoid wage regulations. This opinion is supported by Thorold Rogers's finding that entries of payments are crossed out and replaced with smaller figures in the original document.²⁰ The other possibility is that the value of gifts or food issued on top of the cash pay is not included in the wage rate.²¹ This rising value of food is found in the quality of meals served to harvest workers, as presented by Dyer.²² Accordingly, the wage statistics alone are hardly sufficient to explain detailed changes in the rural economy.

The problem emerges when historians attempt to reconstruct the labourer's living standard by means of casual wage data. If the rising wage rate stands for the rising value of labour-power, how come it is not an appropriate indicator of the labourer's living standard? Farmer, Dyer and Penn have answered a part of this question by pointing out the lack of information about the amount of work the worker did. In the

²⁰ Thorold Rogers, *A history of agriculture*, v. 1, p. 300.

²¹ Hatcher, 'Aftermath', pp. 3-35. Farmer has, however, explained that the data were extracted from the 'wages paid to workers to whom no food was given'; idem, 'Prices and wages, 1350-1500', p. 496.

²² C. Dyer, 'Changes in diet in the late middle ages: the case of harvest workers', *Agricultural History Review*, 36 (1988), pp. 21-37.

manorial account, the wage rate represents the price of a piece of a certain work, *e.g.* threshing a quarter of wheat. In the good year, there was more wheat to thresh and the worker earned more; or when there was labour shortage, the worker might take on more work and earned more. Without the information of the amount of work done by the labourer, it is hard to us to use the price of finishing a piece of work to interpret the labourer's income. The lack of such information provides another explanation for historians' doubt of reconstructing the labourer's income with casual wage data.

Moreover, the question 'how many pieces of work a worker took on' relates to a fundamental problem of this framework. It is known that hire of day labourers for farming operations 'pertains disproportionately to large-scale agricultural concerns that made major inroads into the local labour market at key seasons like harvesting and haymaking', as indicated by L. R. Poos; and R. H. Britnell has observed that '[s]easonal variation and violent harvest fluctuations alone played havoc with the level and composition of demand for labour from month to month and year to year'.²³ The farming of grain created considerable periodical demand for labour to mow the hay, harvest the crop and thresh the sheaves. To cope with the periodical demands, casual labour markets are created, which last for less than a few months altogether. The harvest is the most stressful period having the highest demand for labour during a

²³ L. R. Poos, *A rural society after the Black Death: Essex 1350-1525* (Cambridge, 1991), p. 209; R. H. Britnell, 'Specialization of work in England, 1100-1300', *Economic History Review*, 2nd ser., 54 (2001), p. 8.

relative short period; threshing is worked during the slack seasons; haymaking is somewhat between the two.²⁴ The workers who could find hire in the harvest were not necessarily able to get a job in another operation. Secondly, the demand for labour fluctuated in accordance with the yield. The casual opportunity was unlikely a stable source of income due to the fluctuation. Thirdly, it is doubtful if the short period of casual employment was sufficient for a worker to earn his annual upkeep. Instead it was likely to provide the chance to peasant families to make a supplementary income. Opportunities outside those operations certainly existed, such as ploughing, ditching, or hedging, but they were mostly worked by the peasant household on the holding or by permanent labourers on the business farm. In an agricultural community only a small part of the population lived upon casual hire in agriculture. The assumption that links casual wages with the labourer's income has overlooked the socio-economic context of agriculture.

This problem becomes even more complicated in the context of the late middle ages, when the influence of institutional factors was relatively strong. A number of manorial demesnes still employed labour services. Labour services were a feudal privilege that secured the labour supply and provided the demesne with a cheap labour force. During this period, labour services were still used in seasonal operations such as mowing and the harvest on some manorial demesnes. In a situation where the

²⁴ Farmer, 'Prices and wages, 1350-1500', pp. 467-474.

manorial demesne was a major local employer, this arrangement should reduce the importance of casual labour in seasonal operations. In addition, customary labourers had to work for the manorial demesne by priority, as were temporarily removed from the seasonal labour market. Their chance of earning a supplementary income from their peasant neighbours was decreased. Another possible factor is wage regulations. It has been observed that wage regulations were fairly effective in the 1350s.²⁵ Thereafter they were weakening, though infringements were frequently reported. Despite the uncertainties of executing the regulations, they were a plausible factor that prevented the wage rate from moving in accordance with the market condition, as cited above from Hatcher. The reliability of casual wage data to indicate economic changes could be undermined by these institutional factors. In fact, casual wage rates, which appear to be steady as will be revealed in following chapters, uncomfortably supports an institutional explanation rather than an economic one.

Overall, in the existing study of medieval agricultural labour, the concentration on casual wage evidence has incurred important problems that have to be addressed. The data of casual wage rates, in the form of their purchasing power, have served as suitable evidence for illustrating long-term changes in the relation between population and resources in the existing studies, because of the connection between labour supply

²⁵ B. H. Putnam, *The enforcement of the Statutes of Labourers: during the first decade after the Black Death, 1349-1359* (Honolulu, 1908; reprinted 2002), pp. 219-221.

and population. When one, however, intends to promote the casual wage evidence from the study of long-term trends in the casual labour market to the livelihood of a labourer or to the financial condition of a demesne farm, data of casual wage rates constitute only one of several important factors. In the existing study of medieval agricultural labour, the distinction between different sectors of this economy remains obscure. In my criticism of the use of casual wage data, I intend to clarify the said distinction with the same source material as in the existing studies to answer four questions in relation to the fifteenth-century agricultural wage labour. How important was casual employment during the fifteenth century? How important was casual labour in comparison with labour services? How were permanent labourers employed in collaboration with casual labourers? And what is the difference between the casual wage rate and the permanent farm worker's salary?

1.2 Fifteenth-century English agriculture and the questions of interest

The fifteenth century is usually considered as a continuance of the aftermath of Black Death. During this century plague kept coming back. It has been reported that there were at least thirteen outbreaks between 1400 and 1500.²⁶ A serious outbreak of plague and murrain happened in c. 1438. It was accompanied by a huge reduction in

²⁶ J. Hatcher, *Plague, population and the English economy*, (London, 1977), pp. 57-61; J. W. M. Bean, 'Plague, population and economic decline in England in the later middle ages', *Economic History Review*, 2nd ser., 15 (1963), pp. 427-431.

overseas trade in the 1450s and 1460s and low and stagnant grain prices. Agricultural output was low – at times disastrously so, such as in the late 1430s when supplies of seed corn were affected.²⁷ Thereafter, major outbreaks of plague were observed in 1463/4 and 1479/80.²⁸ Thus, population levels fell dramatically with the Black Death, falling further in the late fourteenth century, and remaining at a low level from 1400 until the sixteenth century. Some local communities might still be subject to continued depopulation, like Kibworth Harcourt (Leics.) where the number of males over the age of 12 was reducing till c. 1450, as illustrated by R. M. Smith.²⁹ This trend caused difficulties in both the labour market and the land market. Since the Black Death, the lack of labour had manifested in the high wage rates as stated above. And the scarcity of people available to take on vacated holdings had both increased the average size of holding and improved the terms of tenancy. This process in the land market might, on the one hand, restrain the villager from taking on hire and, even, make him a capable employer competing in an already tightened labour market; on the other, it might force the lord to rely more on hired labour when he was losing labour services. This economy imposed considerable pressure on hiring in agriculture.

²⁷ J. Hatcher, 'The great slump of the mid-fifteenth century', in R. H. Britnell and J. Hatcher (ed.), *Progress and problems in medieval England: essays in honour of Edward Miller* (Cambridge, 1996), p. 246; A. J. Pollard, 'The north-eastern economy and the agrarian crisis of 1438-1440', *Northern History*, 25 (1989), pp. 103-104.

²⁸ C. Creighton, *A history of epidemics in Britain Vol I: from AD 664 to the Great Plague* (Cambridge, 1965, 2nd edn; 1891, 1st edn), pp. 229, 231-232; J. F. D. Shrewsbury, *A history of bubonic plague in the British Isles* (Cambridge, 1970), p. 146; R. S. Gottfried, *Epidemic disease in fifteenth century England: the medical response and the demographic consequences* (Leicester, 1978), p. 14.

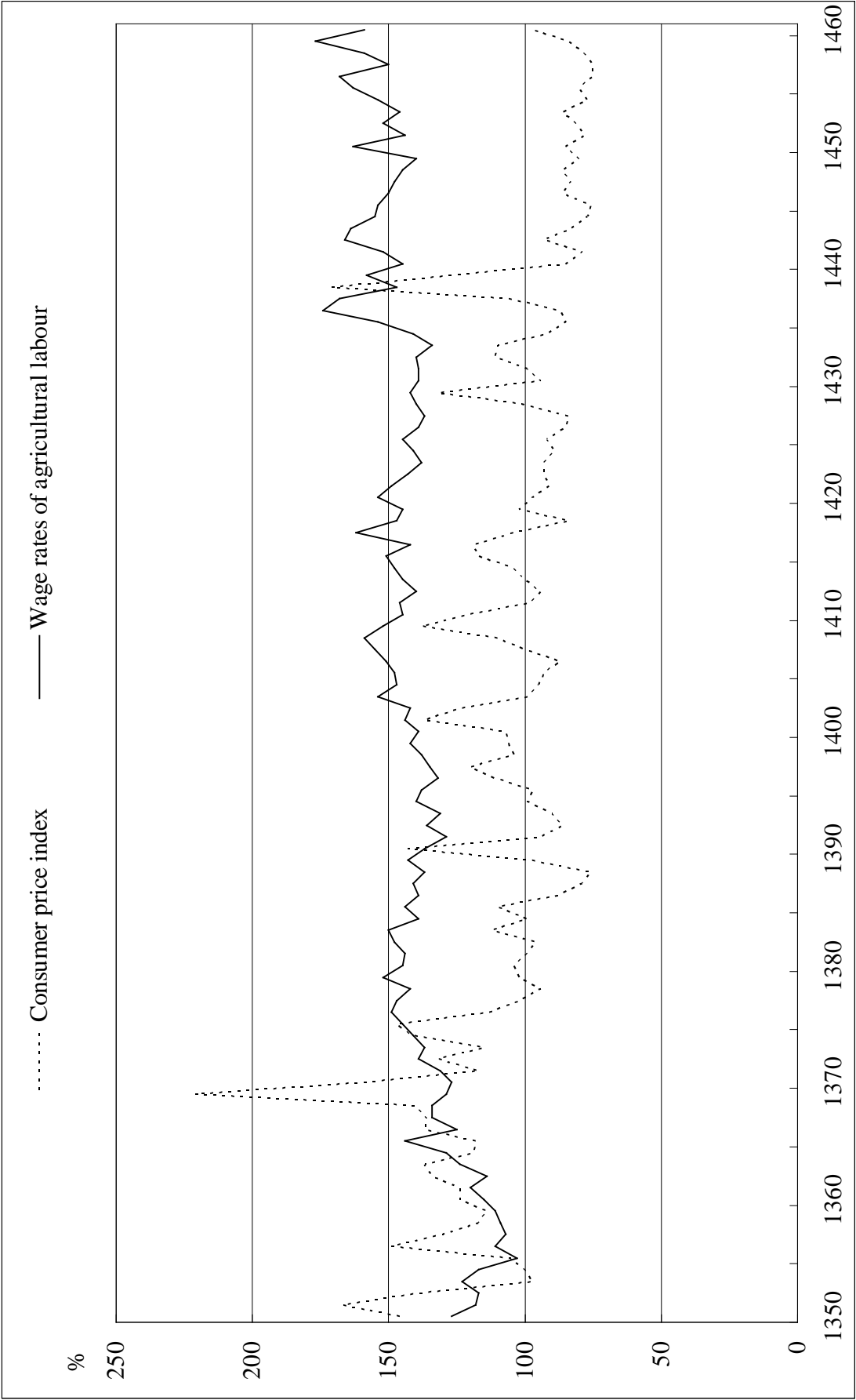
²⁹ R. M. Smith, 'Plagues and peoples: the long demographic cycle, 1250-1670', P. Slack and R. Ward (eds), *The peopling of Britain: the shaping of a human landscape (Linacre Lecture)* (Oxford, 2002), pp. 182-183.

Demographic changes determined the condition in the supply side of the labour market. The wage rate was rising and the price level of grain was as shown in Chart 1.1. Labour shortage in the aftermath of the Black Death eased in the fifteenth century but its influence was still felt. Parliament had to make response frequently and wage regulations were re-issued or revised in 1406, 1414, 1423, 1429, 1445, 1495, and 1497.³⁰ The chart demonstrates that, despite the regulations, the real wage rate was still going up, suggesting that depopulation was going on and that it was getting easier for labourers to maintain a life, as if in a 'golden age of the English labourer', until the mid-century. The persistent labour shortage suggests that the high real wages did not yet make the population recover. The returning pestilence is a possibility that kept the population at a low level. Another possibility is low fertility, which has been elaborated by R. M. Smith and the historians who study servants. The theory is that the high wage rate encouraged female villagers who had been less commonly engaged in paid employment to join the labour market. Thus, the average age of marriage was delayed resulting in shorter life expectancy for giving birth.³¹ Over this century, the economic context is that labour supply remained relatively low and there was little sign of recovery despite the probably higher living standard of the labourer.

³⁰ *Statutes of the Realm*, 2, pp. 157-8, 176-7, 225, 244-248, 337-339, 569, 577, 585, 637; C. Given-Wilson, 'Service, serfdom and English labour legislation, 1350-1500', in A. Curry and E. Matthew (eds.), *Concepts and patterns of service in the later middle ages* (Woodbridge, 2000), pp. 24-25.

³¹ R. M. Smith, 'Geographical diversity in the resort to marriage in late medieval Europe: work, reputation, and unmarried females in the household formation systems of northern and southern Europe', in P. J. P. Goldberg (ed), *'Woman is a worthy wight': women in English society, c.1200-1500* (Stroud, 1992), pp. 25, 29-33, 42, 44-45.

Chart 1.1 Farmer's indices of CPI and money wage rates, 1350-1460.



Source: D. L. Farmer, 'Prices and wages, 1350-1500', in E. Miller (ed.), *The agrarian history of England and Wales*, 3 (Cambridge, 1991), pp. 516-518, 520-522.

It is not surprising that during this difficult period agriculture was shrinking.³² In the seigniorial sector, the lords leased out arable demesnes, ceased cultivating lands, and converted arable lands to pastures. On the estate of Ramsey Abbey, most manorial demesnes, except the home farms, were leased between 1400 and 1410.³³ Canterbury Cathedral Priory retained only the home farm, Monkton, for provisions, while leasing out all the rest by 1411.³⁴ The Abbot of Westminster kept Denham for arable farming before 1420 and raised sheep at Cotswold and Eye until the middle of this century.³⁵ The Durham bursars kept Pittington, which was the bursary's last arable demesne, in hand until 1456.³⁶ It is in the mid-century when arable production largely ceased on the estate of the bishops of Winchester at Marwell (1447), Meon (1447), Ebbesbourne (c. 1454), Harwell (1454), and Overton (1454). Several smaller Norfolk monastic houses also gave up arable husbandry.³⁷ They might as well convert arable lands into pastures. Rising living standards meant there were new markets for wool and meat.³⁸ The wool price remained high until the end of the 1430s. The duchy of Lancaster kept large sheep flocks until the mid-century like on the estates of other lay magnates; and

³² Hatcher, *Plague, population and the English economy*, pp. 36-44.

³³ J. A. Raftis, *The estates of Ramsey Abbey* (Toronto, 1957), pp. 265-266.

³⁴ R. A. L. Smith, *Canterbury Cathedral Priory: a study in monastic administration* (Cambridge, 1969; 1943, 1st edn), p. 200.

³⁵ B. F. Harvey, 'The leasing of the abbot of Westminster's demesnes in the later middle ages', *Economic History Review*, 2nd ser., 22 (1969), p. 19.

³⁶ R. A. Lomas, 'The priory of Durham and its demesnes in the fourteenth and fifteenth centuries', *Economic History Review*, 2nd ser., 31 (1978), pp. 344-345.

³⁷ Hampshire Record Office (hereafter HRO), 11M59/B1/184, 185; B. M. S. Campbell, 'A unique estate and a unique source: the Winchester Pipe Rolls in perspective', in R. H. Britnell, (ed.), *The Winchester Pipe Rolls and medieval English society* (Woodbridge, 2003), p. 33.

³⁸ C. Dyer, *Standards of living in the later middle ages: social change in England c. 1200 – 1520* (Cambridge, 1989), pp. 151-160, 175-177.

a handful of ecclesiastical managers kept them until the 1460s and 1470s.³⁹ In the mid-fifteenth century cattle rearing was probably the only sector that generated good income.⁴⁰ Monastic houses like Tavistock Abbey, Maxstoke Priory and Arden Abbey as well as lay magnates kept large herds for dairy produce and slaughter.⁴¹ In the middle of the fifteenth century, in the Forest of Arden, the acreage under pasture had increased five-fold since the mid-fourteenth century and, by c. 1500, exceeded arable acreage.⁴² These changes reflect the reaction of the demand side of the labour market to the reduced supply of labour.

The relationship between supply and demand for labour was affected by several socio-economic changes in this period and there is a need for greater understanding of the demand side, which has been overlooked in the existing studies. Casual wage evidence has been extensively used, but how much casual labour was employed on the farm? The importance of seasonality in the market for agricultural labour is recognised, but the extent to which it affected labourers' living standards and the management of labour on the manorial demesne is not fully understood. Similarly, the varied composition of the agricultural workforce has been observed, but there is less

³⁹ J. M. W. Bean, 'Landlords', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 574-575, 582-583; C. Dyer, *Lords and peasants in a changing society* (Cambridge, 1980), p. 130; J. Hare, 'Regional prosperity in fifteenth-century England: some evidence from Wessex', in M. A. Hicks (ed.), *Revolution and consumption in late medieval England* (Woodbridge, 2001), pp. 117-118.

⁴⁰ R. A. Lomas, 'A northern farm at the end of the middle ages: Elvethall manor, Durham, 1443/4-1513/14', *Northern History*, 18 (1982), p. 43.

⁴¹ A. Watkins, 'Cattle grazing in the forest of Arden in the later middle ages', *Agricultural History Review*, 37 (1989), pp. 15-17; H. P. R. Finberg, *Tavistock abbey: a study in the social and economic history of Devon* (Cambridge, 1951), pp. 133-144.

⁴² Watkins, 'Cattle grazing', p. 21.

work on the relative importance of each element.

Generally speaking, agriculture was conducted in its traditional medieval way. The main grains were wheat, rye, barley, oats and legumes, planted according to one of the six crop-rotation systems.⁴³ Grains were sorted into two sowing seasons in autumn and in spring. During this period, plough-teams had to work continuously and intensely for roughly six months. The grains were harvested in August and September, when the work had to be rushed to avoid bad weather that might wet the straw and sprout it. By-laws were made to urge villagers to take part in it; and parliamentary laws were promulgated to force people to work on local farms.⁴⁴ Between the sowing and the harvest seasons there were the periods available for other operations, such as haymaking in the summer and threshing in the winter. Seasonal demands for labour were generated to take care of them. In fifteenth-century England the composition of the farm workforce varied, but mostly consisted of casual labourers, the *famuli*, and customary labourers if in the seigniorial sector, working collaboratively. The focus on casual labourers in existing studies has overlooked the fluctuating quantity of the demand for labour; it has also marginalised the importance of the other two types of labourer.

⁴³ Campbell, *English seigniorial agriculture*, pp. 275-301.

⁴⁴ W. O. Ault, *Open-field husbandry and the village community: a study of agrarian by-laws in medieval England* (Philadelphia, 1965), pp. 55, 72, 80, 95; *Statutes of the Realm*, 2, p. 56; E. G. Kimball (ed.), *Records of some sessions of the peace in Lincolnshire 1381-1396*, v. 2 *the parts of Lindsey*, *The Publications of the Lincoln Record Society*, 56 (1962), p. 237.

As to the *famuli*, like casual labourers, they sold their labour power working for agricultural employers and they worked continuously rather than periodically for an extended period that was usually a year to take on continuous responsibilities like ploughing and shepherding.⁴⁵ In the manorial account, every one of them had a specific title, such as the carter, the ploughman, the shepherd, the maid, or the bailiff. These titles represent their designated responsibilities, on which they spent most of their time in the contract period; whilst in other farming activities they were of limited importance.⁴⁶ So far historians have examined this group of labourers separately from casual labourers, probably because of uncertainties in the terms of employment. In the earlier period, many *famuli* were customary tenants who took on the post as a part of rent. They were compensated quittance of rent, meals, services, and a small amount of salary. The composition of remuneration is difficult to analyse.⁴⁷ Comparatively, the terms of employment were much clearer during our period. By 1400, the *famuli* had mostly become paid labourers working for salaries not under obligations; and their remuneration had been simplified into cash and grain.⁴⁸ The employment of their labour power was making clear that the *famuli*, in collaboration with casual labourers, were hired to satisfy a special type of demand in agriculture, as one group served as

⁴⁵ M. M. Postan, *The famulus: the estate labourer in the 12th and 13th centuries*, *Economic History Review Supplements* 2 (1954), pp. 16-17, 31; D. L. Farmer, 'The *famuli* in the later middle ages', in R. Britnell and J. Hatcher (eds.), *Progress and problems in medieval England* (Cambridge, 1996), pp. 211-214.

⁴⁶ Farmer, 'The *famuli*', pp. 221-225.

⁴⁷ Hatcher, 'Aftermath', p. 29; Farmer, 'The *famuli*', p. 229.

⁴⁸ Postan, *The famulus*, pp. 37, 43-46; Farmer, 'The *famuli*', pp. 28-209, 225, 229-236.

the essential workforce and the other coped with seasonal surge in workload. In this context, discussion of wage labour should include both groups of labourers. And because of the annual contract, the *famuli* were more likely to live upon hire. The data of their salaries, which are kept in consistent format in the source material with only a few uncertainties in comparison with earlier periods, are a potential indicator of the labourer's annual income.

Labour services were a factor that influenced the demand for paid labour on the demesne farm. In existing studies, it seems to be agreed that by 1400 in many places labour service was reduced to a small degree and that some remnants of this privilege persisted for a while in a downward trend leading to their disappearance. And even on the demesne farms where labour services were still performed, only boon work, which demanded the tenants to work in specific operations, was used.⁴⁹ This understanding, however, understated the importance of labour services in the late middle ages. In M. Page's translation of the Winchester Pipe Rolls, on the Merdon demesne, for example, the whole threshing task was done by customary labourers, the whole 253 acres were also reaped by them, and 120 acres of ploughing service were performed in 1409/10.

⁴⁹ P. D. A. Harvey, 'Tenant farming and farmers: the Home Countries', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 667-669; E. King, 'Tenant farming and tenant farmers: the East Midlands', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 629-630; C. Dyer, 'Tenant farming and tenant farmers: The West Midlands', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), p. 639; B. F. Harvey, *Westminster abbey and its estates in the middle ages* (Oxford, 1977), pp. 256-261, 269-271; Dyer, *Lords and peasants*, pp. 120-121.

Haymaking was the only major operation that the demesne hired casual labourers.⁵⁰

The Merdon pattern lasted until the end of the Pipe Rolls in 1454/5. Thus, there is the possibility that the demand for casual labour was reduced considerably by customary labour; or even that the employment of the *famuli* was influenced by it. This pattern poses a challenging question to the existing conception that presumes paid labourers to have been the major labour force, whose supply and demand directly reflected the changes in population. What if paid labourers were the ‘minor’ labour force? This question has to be addressed in order to validate the use of wage evidence from either the casual sector or the permanent sector as an indicator of the economy.

Accordingly, an examination of wage labour has to include the elements of the demand side that accounts for the amount of demands, the composition of the workforce, and other details which are not covered by wage data. Indeed, casual wage data may represent an aspect of the agricultural labour market, but until the body of the labour market is clarified it is hard to establish to what extent casual wage evidence represents changes in the labour market. To focus the discussion, those elements are concentrated into three chapters dedicated to examining casual labour, labour service, and the *famuli*, intending to analyse the comparative importance between different types of labourers. First, despite the common interest in casual wage evidence, the

⁵⁰ M. Page, *The pipe roll of the bishopric of Winchester, 1409-1410, Hampshire Record series, 16* (Winchester, 1999), pp. 374-377.

constitution of casual labour still requires detailed examination, especially of seasonal variations in demand for labour and of the significance of casual labourers in the workforce. Secondly, the significance of labour services in the workforce has to be clarified, even though it is commonly assumed that it was no longer important in the late middle ages. In fact the source material demonstrates a rather intriguing pattern of employing labour services. Thirdly, the employment of permanent farm labourers – the *famuli* – has so far been examined as an independent subject; but since they were contracted for the year, it is reasonable to consider the possibility that they worked in collaboration with casual labourers and customary labourers. Their conclusions shall demonstrate the problems of using casual wage evidence in studying fifteenth-century agricultural wage labour. On this basis, a solution to these problems will be proposed in Chapter 6. Summaries of the chapters are as follows.

Chapter 2 contains a discussion of the source material – manorial accounts. The purpose is to identify the potential information relevant to wage labour, to set it in the context of agricultural wage labour, and to construct a model of the demand side of the labour market with the said information. It will be demonstrated that manorial accounts contain a considerable amount of useful information which has not been fully exploited. Apart from wage data, four categories of records are examined in detail. First, the information in relation to the demand for labour shall be gathered.

The manorial accounts will be used to comment on demand for labour on the demesne and the extent to which this demand was satisfied by casual labour. Secondly, the data that indicate the comparative importance of the other types of labourer will be presented. With the casual labour evidence available, I shall be able to recognise the portion of work done by other types of labourer. Thirdly, the manorial accounts will also be used to contribute to our understanding of the employment of the *famuli*, with particular attention paid to their involvement in seasonal tasks, the amount of work they undertook each day, and payments made to them. Lastly, the record of labour service in the fifteenth century is critical to this project and worth an in-depth study due to the apparent influence of labour service on wage labour.

The use of casual wage evidence to represent the labourer's income is only valid if the casual labourer worked consecutively across the year, but this presumption has not been proven. The purpose of Chapter 3 is to examine the distribution of labour inputs during the year and use the distribution to demonstrate the limited availability of job opportunities in the casual sector. The examination is conducted from three aspects. First, because casual labourers were employed on a seasonal basis, a farming calendar is reconstructed to illustrate when casual labourers were used in the year. Secondly, the casual labour input in respective operations is estimated through the cost of casual labour to illustrate that the demand for casual labour varied seasonally.

Lastly, a comparative study of between the overall labour input and the casual labour input in seasonal operations is conducted using the farming calendar to illustrate that, first, casual labourers were only used in a few months in the year, and secondly the employer tended to use other types of labourer in place of casual labourers. It shall be demonstrated that the labour markets in the busy seasons and in the slack seasons behaved differently. As a result, many casual labourers were unlikely to be fully employed across the year.

The study of wage labour will be problematic without considering the influence of labour services, because labour services account for a considerable part of farming work and because its abandonment might have serious consequences in labour supply in demesne farming. In Farmer's and other historians' studies of medieval agricultural wage labour, the role of labour services is marginalised as if they were no longer used. My source material indicates otherwise. Thus, Chapter 4 is intended to reconstruct the use of labour services in the operations. It is intended to argue that labour services were still persistently used during this century to reduce the cost of labour especially in the harvest. The analysis is conducted by concentrating on detailed cases like Longbridge Deverill, Werrington, and Ebbesbourne that provide robust information for studying how labour services were employed and abandoned. The conclusion shall illustrate that though the employment of labour services undermined the importance

of paid labourers on the manorial demesne, the release of labour services increased the use of paid labourers only to a limited extent by the end of the fifteenth century. Hence are confirmed the importance of paid labour in the seigniorial sector and a pattern how casual labourers were flexibly used to cover minor changes.

In collaboration with casual labourers, the *famuli* constituted the other type of paid labourer, whose importance has been implied by several historians in the early twentieth century. However, in the existing studies, with their terms of employment and responsibilities learned, little has been explained of how much they worked and how important they were in comparison with casual labourers using quantitative approaches. In Postan's and Farmer's studies, especially, the *famuli* are considered to be the main undertakers of continuous operations but working as a support labour force in seasonal operations. In Chapter 5, I shall argue that the significance of the *famuli* in demesne farming has been underestimated. It will illustrate in the first section that they were permanent farm workers involved in a wide range of farming activities. The second section intends to demonstrate that in terms of both the labour input and the cost of labour, the *famuli* were more important than casual labourers. Hence the *famuli* were the main labour force. Knowing that although the *famuli* were the main labour force, casual labourers were still consistently employed, this section is intended to explain how the two types of labourers worked together. A case study of

Monkton Deverill manorial demesne shall discuss their relationship in detail.⁵¹ The conclusion will support the argument that the employment of the *famuli* was a more important factor than casual labourers in the agricultural workforce in demesne farming.

The casual wage evidence has been widely used as an indicator of the economy; in the meanwhile it has been extensively criticised. Particularly, the money wage rates were influenced by many social factors that undermine the casual wage evidence's reliability in indicating detailed happenings. Over the fifteenth century, conspicuous steadiness is observed in money wage rates, implying a calm labour market, whilst the rising trend in real wage rates suggests labour shortage. To tackle this controversy, Chapter 6 is intended to include the permanent farm worker's yearly salaries and to compare the trends in them with the trends in casual wage rates. The purpose is to demonstrate the divergent movements between the two sets of data and to argue that the permanent worker's increasing salaries reflect the casual labourer's increasing income, which is in line with the understanding of labour shortage but not covered by traditional wage data. The first section of this chapter shall present 'wage-stickiness' in casual wage rates. The second section is intended to construct the trends in the salary of the *famulus*. The trends will be presented using three types of data: the index

⁵¹ R. C. Allen, 'The growth of labor productivity in early modern English agriculture', *Explorations in Economic History*, 25 (1988), pp. 128, 130.

of stipends that were the cash component of the salary, the index of the cash value of the salary, and the index of the grain value of the salary. In the third section, I shall explain how the three sets of trends represent the rising income of the *famulus* and how they reflect the increasing income of the casual labourer. In the end, I shall propose that the divergence between the movements of the permanent worker's salary and of the casual money wage rate may be an answer to several controversies in the study of medieval socio-economic history.

From the conclusions of Chapter 3, 4, and 5, an argument shall be established that casual employment was not a reliable source of income for labourers and that the method of using casual wage evidence to indicate the labourer's living standards is problematic. It shall also be established that the post of the *famulus* provided a poorer but more stable livelihood. Moreover the influence of the use of labour services shall be excluded due to its limited importance. During a period of labour shortage, thus, the labourer's income should increase and the divergent movements between casual wage rates and the *famulus*'s salary could have further implications, which will be discussed in the final conclusion.

Chapter 2 Agricultural labour in fifteenth-century manorial accounts

The term ‘wage labour’ comprises a range of socio-economic factors apart from the people that were involved, the wage data that have been extensively studied, and the labour market that was subject to the post-Black Death recession. But in existing studies, wage labour is a concept based on the balance between supply and demand for a commodity – labour-power – expressed by means of trends in wage rates. This framework was devised to elaborate the change in population, which is equal to the supply of labour.⁵² A critical problem, however, needs to be addressed – how much do the wage data tell us about the labour market?

For the study of agricultural wage labour, the existing wage series have provided historians a convenient source material for interpreting economic events by means of the law of supply and demand, which indicates that the rise in wage rates was a result of demand exceeding supply and that the fall in wage rates was a result of supply exceeding demand. The population is the basis of labour supply as well as the source of demand for foodstuffs. Taking advantage of this framework, M. M. Postan was able to demonstrate a long-term decrease in population by means of the rising purchasing power of the daily wage.⁵³ G. Clark has identified the high level of the real wage rate

⁵² It should be reminded that labour is not usually considered a ‘commodity’, because it cannot be promptly reproduced like ordinary commodities. However, the law of supply and demand is still applicable in this instance, since the higher wage rate is always more competitive than the lower wage rate in securing labour forces.

⁵³ M. M. Postan, ‘Some economic evidence of declining population in the later middle ages’, *Economic History Review*, 2nd ser., 2 (1950), 225-229.

during the fifteenth century suggesting a dearth of labour and a weak demand for grain.⁵⁴ D. L. Farmer, in the analysis of his own wage data, has illustrated shortage of labour in the aftermath of plague with the record of exceptionally high pay, implying urgent shortage of labour during mass mortality.⁵⁵ The strength of the existing wage evidence, either alone or calculated with the price level to produce the real wage rate, has been frequently demonstrated in the existing studies.⁵⁶

Despite the importance of the wage data as an historical source, historians have described many problems in interpreting the trends in wage rates. Postan himself has remarked the danger of imprudently using wage statistics to measure the population trend, implying the need for an understanding of the labour market in using the data.⁵⁷ A. R. Bridbury, citing Postan's remark, has further elaborated 'the statistics of wages and prices do not indicate by the slightest movement that there was any change in the relative scarcities of land and labour'.⁵⁸ Monetarists, who challenge the framework based on wage statistics, have also pointed out there is still a way to go for us to understand the socio-economic context of the wage evidence. In particular, R. S. Lopez and H. A. Miskimin have asked 'what do the earnings of employed masons mean, while we do not know how many masons were unemployed and for how

⁵⁴ G. Clark, 'The long march of history: farm wages, population, and economic growth, England 1209-1869', *Economic History Review*, 2nd ser., 60 (2007), pp. 97-118.

⁵⁵ D. L. Farmer, 'Prices and wages, 1350-1500', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 469-470.

⁵⁶ For example, B. M. S. Campbell, *English seigniorial agriculture 1250-1450* (Cambridge, 2000), pp. 3-10; J. Hatcher, *Plague, population and the English economy 1348-1530* (London, 1977), pp. 47-54.

⁵⁷ Postan, 'Some economic evidence', pp. 243-244.

⁵⁸ A. R. Bridbury, 'The Black Death', *Economic History Review*, 2nd ser., 26 (1973), pp. 577-578.

long?’⁵⁹ B. F. Harvey has made a similar comment indicating ‘wages, prices, and rents often betray the influence of the social system as clearly as that of changes in supply and demand’.⁶⁰ Although the casual wage series are an indicator of changes in supply and demand in general, they do not permit historians to comment in detail on the socio-economic context in which labour was carried out.

Specifically, there are at least three limitations of the existing framework, which have been mentioned in existing studies but not yet been included in the study of wage labour. First, Postan's work on population concentrated on the supply side of the labour market, omitting the changes in the demand side. The continued importance of subsistence agriculture suggests the demand side may have changed less. However, there certainly were shifts in the demand for labour during the late fourteenth and fifteenth centuries in response to yields and longer-term shifts in sown acreage. These shifts are confirmed by work on agricultural output. For example, yields, studied by J. Z. Titow, Farmer and others, affected demand for threshing labour.⁶¹ And the sown acreage, which R. Britnell and C. Dyer have illustrated to be falling during the late

⁵⁹ R. S. Lopez and H. A. Miskimin, ‘The economic depression of the Renaissance’, *Economic History Review*, 2nd ser., 14 (1962), p. 411.

⁶⁰ B. F. Harvey, ‘Introduction: the “crisis” of the early fourteenth century’, in B. M. S. Campbell (ed.), *Before the Black Death: studies in the ‘crisis’ of the early fourteenth century* (Manchester and New York, 1991), p. 6.

⁶¹ J. Z. Titow, ‘Evidence of weather in the account rolls of the bishopric of Winchester 1209-1350’, *Economic History Review*, 2nd ser., 12 (1960), pp. 360-407; P. F. Brandon, ‘Cereal yields on the Sussex estates of Battle Abbey during the later middle ages’, *Economic History Review*, 2nd ser., 25 (1972), pp. 405, 412-414; D. L. Farmer, ‘Grain yields on the Winchester manors in the later middle ages’, *Economic History Review*, 2nd ser., 30 (1977), pp. 557-563; M. M. Postan, ‘Medieval agrarian society in its prime: England’, in M. M. Postan (ed.), *The agrarian life in the middle ages, The Cambridge economic history of Europe*, 1, 2nd edn. (Cambridge, 1966), p. 602; B. M. S. Campbell and M. Overton, ‘A new perspective on medieval and early modern agriculture: six centuries of Norfolk farming c.1250-c.1850’, *Past and Present*, 141 (1993), p. 41.

middle ages, determined the demands for ploughing labour and harvest labour.⁶² In addition, during this period the composition of the workforce was much complicated which, as stated, requires close examination in order to establish the comparative importance of different types of labourer. The employment of labour services, studied by D. Stone for their work efficiency in comparison with paid labourers, reduced the demand for paid labour.⁶³ As to the permanent farm labourer, Farmer has elaborated the terms of employment and the responsibilities, demonstrating an important element of the workforce working side by side with casual labourers. Thirdly, payments given to the permanent paid labourer are not included in wage statistics, whilst the manorial accounts provide substantial details suitable for statistical analysis. For example, M. Mate and B. Dodds have produced tables and charts that illustrate trends in their wage rates suggesting a source material that may be as useful as casual wage data.⁶⁴ These uses of the source material have illustrated that historians are aware of possible details of the demand-side of the labour market. Frankly, in terms of wage labour, the source material – the manorial accounts – is a source material of the demand side, accounting for how much work was available, what types of labourer were employed, how much

⁶² R. H. Britnell, *The commercialisation of English society 1000-1500* (Manchester and New York, 1996), p. 156; C. Dyer, *Lords and peasants in a changing society* (Cambridge, 1980), pp. 121-123, 128-132.

⁶³ D. Stone, 'The productivity of hired and customary labour: evidence from Wisbech Barton in the fourteenth century', *Economic History Review*, 2nd ser., 50 (1997), pp. 640-656.

⁶⁴ M. M. Postan, *The famulus: the estate labourer in the 12th and 13th centuries*, *Economic History Review Supplements* 2 (1954); D. L. Farmer, 'The famuli in the later middle ages', in R. Britnell and J. Hatcher (eds.), *Progress and problems in medieval England* (Cambridge, 1996), pp. 207-236; M. Mate, 'Tenant farming and tenant farmers: Kent and Sussex', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), p. 691; B. Dodds, 'Workers on the Pittington demesne in the late middle ages', *Archaeologia Aeliana: miscellaneous tracts relating to antiquity*, 5th ser., 28 (2000), pp. 151-154.

labour was hired, and how much was paid for the hire. The purpose of this chapter is to assemble relevant information to construct a model of the demand-side and to present details.

Dyer and S. A. C. Penn have said that wage data are the start of a new stage of studying medieval socio-economic history.⁶⁵ By examining the source material and assembling an evidential basis of relevant information, we may explore how far we can venture into this new stage. To pursue this purpose, three sections are given to this chapter. The first section presents a collection of fifteenth-century English manorial accounts. In the second section it is intended to explore the detailed information that is relevant to agricultural labour, outlined by a sample account of Elvethall. Finally, the data recognised above shall be redefined in order to model the demand side of the agricultural labour market. The model shall provide an explanation of the problems found in the use of casual wage evidence. It shall also establish the grounds for further investigation of agricultural labour, as will be illustrated in the conclusion.

2.1 Overview of the sample

The manorial account is a managerial document that accounts for charge and discharge of the demesne's assets. It was the local agent's responsibility to account to

⁶⁵ C. Dyer and S. A. C. Penn, 'Wages and earnings in late medieval England: evidence from the enforcement of the Labour Laws', *Economic History Review*, 2nd ser., 43 (1990), pp. 357, 372.

the audit for the money, services, cattle and other goods due to and received on the manor. P. D. A. Harvey has sorted fifteenth-century manorial accounts into two categories, of which one is the account of lease, whose record is simple and largely dedicated to receipt of rent; and of which the other is the traditional pattern used on the demesnes that cultivated the field or pastured cattle.⁶⁶ For this research, the latter category must be further separated into the accounts from the demesne that cultivated the field and from the one that did not.

Specifically, as far as surviving accounts illustrate, all manorial demesnes hired labourers to take care of meadows, cattle, carriage and maintenance, but the demesne that conducted cultivation preserved much more detail. In the collection of accounts from the estates of the dukes of Lancaster from the fifteenth century, the costs of sheep farming and of administration form the body of the cost of labour.⁶⁷ In the Blakewell accounts from Shropshire over this century and in the Longbridge Deverill accounts from 1446-1450, the cost of labour consists of wages paid to mowers, for administrators' salaries, and for the expense of maintenance.⁶⁸ Simple accounts were composed to keep records of rent and administration fees when grain production ceased. Such accounts do not contain information of agricultural labour, but, instead,

⁶⁶ P. D. A. Harvey, *Manorial records, British Records Association, Archives and the User 5* (London, 1984), pp. 35-37.

⁶⁷ The number of the account rolls preserved from those demesnes is large. Actually, they constitute the whole division of DL 29 at the National Archives catalogue. On the manorial demesne at Somebourne (Dors.), for example, sheep farming ceased in 1465/7; The National Archives (hereafter TNA), DL 29/687/11146.

⁶⁸ On the Blakemere demesne (Salop) haymaking was its harvest work and a considerable cost of £4 11s 7½d was spent in the summer 1428. See Shropshire Archives (hereafter SA), BP 212/82 1427. As for Longbridge Deverill, see Somerset Heritage Centre (hereafter SHC), T\PH\lon/2/6/8084, 9835, 9837, 9876, 10709.

illustrate the pattern of 'a record of obligations and their discharge' as indicated by J. Z. Titow.⁶⁹ Only in accounts from manors where cultivation continued on behalf of the lord do we find details of the cost of labour. Cultivation is a labour-intensive activity. The need for hired hands swelled the cost, which was carefully recorded as the cost of ploughs, the cost of threshing, the cost of mowing and weeding and haymaking, the cost of the harvest, and a payroll of permanent labourers comprising a good number of ploughmen. More details may also be found in these sections of the accounts, such as the amount of the total workload and the amount of work done by various types of labourer. In some cases, an account of labour services is available, providing details of how the demesne reduced the cost of labour using this customary workforce. Uniformity is considerable in these documents and allows systematic analysis to be conducted.

The concentration on the accounts of cultivation imposes a major limitation on the research, because manorial accounts are only available from the seigniorial sector during this period, when grain cultivation was disappearing from the seigniorial sector. Demesne farming was at its height in the thirteenth and the early fourteenth centuries. After the Black Death, mass leasing of manorial demesnes commenced; on many that were maintained in direct management by the lord grain cultivation ceased. By 1400, many accounts of arable demesnes were discontinued. No major house, lay

⁶⁹ J. Z. Titow, *English rural society, 1200-1350* (London, 1969), p. 25.

or ecclesiastical, was immune from this change. Thus, the sampling basis is small at the beginning of the fifteenth century and it is shrinking during this period. By 1500, all except the Elvethall account were discontinued.

In detail, in the late fourteenth century, cultivation ceased on many estates of magnates, such as the estate of the bishops of Worcester, where part of it was leased and part was converted to pastures.⁷⁰ On the Ramsey Abbey estate, most manorial demesnes were farmed out between 1400 and 1410.⁷¹ The Canterbury Cathedral Priors retained the home farm, Monkton, for cultivation and leased the rest by 1411.⁷² The abbots of Westminster produced grain at Bourton-on-the-Hill, Denham, and Pyrford in 1400, but they were all leased in the first two decades of this century.⁷³ Those that persisted with cultivation mostly gave up in the middle of the fifteenth century. The bishops of Winchester were able to maintain grain cultivation on 24 out of 77 manorial demesnes in 1409/10.⁷⁴ In c. 1450, cultivation ceased on the last batch of arable demesnes; and the demesnes were farmed out at Marwell (1447), Meon (1447), Ebbesbourne (c. 1454), Harwell (1454), and Overton (1454).⁷⁵ The last two,

⁷⁰ Dyer, *Lords and peasants*, pp. 150-152.

⁷¹ J. A. Raftis, *The estates of Ramsey Abbey* (Toronto, 1957), pp. 265-266.

⁷² R. A. L. Smith, *Canterbury Cathedral Priory: a study in monastic administration* (Cambridge, 1943), p. 200.

⁷³ B. F. Harvey, 'The leasing of the abbot of Westminster's demesnes in the later middle ages', *Economic History Review*, 2nd ser., 22 (1969), p. 19.

⁷⁴ M. Page, *The pipe roll of the bishopric of Winchester, 1409-1410, Hampshire Record series 16* (Winchester, 1999).

⁷⁵ The Winchester Pipe Rolls, Hampshire Record Office (hereafter HRO), 11M59/B1/184, 185; B. M. S. Campbell, 'A unique estate and a unique source: the Winchester Pipe Rolls in perspective', in R. H. Britnell (ed.), *The Winchester Pipe Rolls and medieval English society* (Woodbridge, 2003), p. 33.

Merdon and Ecchinswell, were leased by Michaelmas 1472.⁷⁶ In B. M. S. Campbell's list of Norfolk account rolls, only 16 out of the 82 series survived into 1400 and many ended shortly. Only four of the 16 series are long enough for comprehensive studies, though they, *i.e.* Plumstead, Martham, Flegg, and Taverham, were discontinued by 1430.⁷⁷ The Durham Priory bursars farmed out Pittington in 1456. The priory hostillers, however, maintained the Elvethall demesne to produce grain until the early sixteenth century.⁷⁸ In comparison with the conservation of the accounts from the thirteenth and the fourteenth centuries, the number of useful accounts from our period is much smaller.⁷⁹

The source material is mostly collected from ecclesiastical estates, of which the bishopric of Winchester, Battle Abbey, Glastonbury Abbey, and Durham Priory are the important sources. Four series are available from the estate of Norwich Priory but they cover up to *c.* 1430. A small number of minor monastic houses also produced account rolls, like the demesnes at Hurdwick (Devon) and Werrington (Cornwall) belonging to Tavistock Abbey;⁸⁰ the demesne at Broadway managed by the Abbey of

⁷⁶ Campbell, 'A unique estate', pp. 32-33.

⁷⁷ B. M. S. Campbell, 'Arable productivity in medieval England: some evidence from Norfolk', *Journal of Economic History*, 43 (1983), pp. 401-404.

⁷⁸ R. A. Lomas, 'The priory of Durham and its demesnes in the fourteenth and fifteenth centuries', *Economic History Review*, 2nd ser., 31 (1978), pp. 344-345; J. A. Tuck, 'Tenant farming and tenant farmers: the northern borders', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 587-588.

⁷⁹ The most complete list of account rolls might be found in Campbell's Norfolk accounts database and FTC accounts databases; see, Campbell, *English seigniorial agriculture*, pp. 453-470; G. Harriss, *Shaping the nation: England 1360-1461* (Oxford, 2005), pp. 235-237.

⁸⁰ Devon Record Office (hereafter DRO), D52/1 Hurdwick 1462-1497; DRO, D52/1 Werrington 1412-1498; H. P. R. Finberg, *Tavistock Abbey: a study in the social and economic history of Devon* (Cambridge, 1951).

St. Mary and St. Eadburga of Pershore (Worcs.);⁸¹ and the demesne at Hewell owned by Bordesley Abbey (Worcs.).⁸² Some monasteries paid great attention to cultivation and produced exceptional details that allow close examination, such as the account of the demesne of the Priory of Catesby.⁸³ As far as is known to us, there is no useful account from the leading lay magnates, though some carried on with sizeable sheep farming as above stated. From this century, only two series of accounts from lay magnates have been consulted. One series is from the manorial demesne at Ormesby St Margaret that belonged to the Cleres in Norfolk; the other is the single roll of Legh that belonged to the Talbots in Shropshire. The detail of this collection and the location of the estate are listed in Table 2.1.⁸⁴

These thirty-four series of accounts reveal a major limitation of the sample. The seigniorial sector was then an insignificant part of English agriculture. The *Hundred Rolls* of 1279/80 illustrate that 35% of the assessed property was in the seigniorial sector.⁸⁵ A similar figure in early fourteenth-century Wiltshire has been produced by J. N. Hare. But Hare estimates that arable demesnes were only 10% or less of the

⁸¹ J. W. Willis-Bund and W. Page (eds.), *The Victoria history of the county of Worcester*, 4 (1924), pp. 33-43.

⁸² J. W. Willis-Bund and W. Page (eds.), *The Victoria history of the county of Worcester*, 3 (1913), pp. 223-230.

⁸³ W. D. Adkins (ed.), *The Victoria history of the county of Northampton*, 2 (1906), pp. 121-125.

⁸⁴ The original plan of this research was to examine all the fifteenth-century English manorial account rolls preserved in Britain. This plan was, of course, too ambitious. Soon I learned that there were the rolls preserved at the National Archives and other repositories not listed in any publications; and that even the series of rolls that had been published might not come to our attention. Among them the greatest regret is the series of Barnhorn manorial account rolls 1354-1495, which are preserved in microform at East Sussex Record Office. This information was given by Prof Campbell at the Economic History Society annual conference in the spring of 2010, which was too late for me to consult the said document.

⁸⁵ The survey was conducted in Huntingdonshire, Cambridgeshire, Bedfordshire, Buckinghamshire, Oxfordshire, and Warwickshire; see, E. A. Kosminsky, R. H. Hilton, (ed.), and R. Kisch (trans.), *Studies in the agrarian history of England in the thirteenth century* (Oxford, 1956), pp. 7-8, 90-92; R. Faith, 'Demesne resources and labour rent on the manors of St. Paul's Cathedral, 1066-1222', *Economic History Review*, 2nd ser., 47 (1994), pp. 661-662.

Table 2.1 The list of series of fifteenth-century manorial account rolls

| Manor | Period | No. of rolls | Reference |
|--|-----------|--------------|--|
| Berkshire | | | |
| Brightwell ^W | 1400-1449 | 34 | HRO, 11M59/B1/150-187 |
| Harwell ^W | 1400-1451 | 35 | HRO, 11M59/B1/150-188 |
| Woolstone | 1404-1468 | 18 | TNA, SC 6/757/21-758/19 |
| Buckinghamshire | | | |
| Ivinghoe ^W | 1400-1427 | 23 | HRO, 11M59/B1/150-172 |
| Cornwall | | | |
| Werrington ^T | 1412-1498 | 14 | DRO, D52/1 Werrington 1412-1498 |
| Devonshire | | | |
| Hurdwick ^T | 1462-1497 | 15 | DRO, D52/1 Hurdwick 1462-1497 |
| Durham | | | |
| Elvethall ^D | 1424-1528 | 35 | DCDM, EAR 1424-1528 |
| Pittington ^D | 1405-1451 | 21 | DCDM, PAR 1405-1451 |
| Hampshire | | | |
| Crawley ^W | 1400-1448 | 33 | HRO, 11M59/B1/150-186 |
| Ecchinswell ^W | 1400-1454 | 38 | HRO, 11M59/B1/150-191 |
| Marwell ^W | 1400-1447 | 32 | HRO, 11M59/B1/150-185 |
| Meon ^W | 1400-1447 | 32 | HRO, 11M59/B1/150-185 |
| Overton ^W | 1400-1453 | 37 | HRO, 11M59/B1/150-190 |
| Twyford ^W | 1400-1432 | 23 | HRO, 11M59/B1/150-176 |
| Norfolk | | | |
| Flegg ^N | 1406-1427 | 8 | NRO, DN/EST 9/12-19 |
| Martham ^N | 1400-1423 | 12 | NRO, NRS/20D2/5905-5916 |
| Ormesby St Margaret | 1400-1454 | 20 | TNA, SC 6/938/25-941/1 |
| Plumstead ^N | 1402-1419 | 7 | NRO, DCN 60/29/40-46 |
| Taverham ^N | 1413-1423 | 10 | NRO, DCN 60/35/43-53 |
| Northamptonshire | | | |
| Catesby | 1414-1448 | 6 | TNA, SC 6/946/16, 18, 21, 24, 6/947/1, 3 |
| Shropshire | | | |
| Legh | 1497 | 1 | DRO, D52/1 Legh 1497 |
| Somerset | | | |
| Walton ^G | 1402-1486 | 25 | SHC, T\PH\lon/2/13/10033-41, 10789-95, 10797-9, 10818-21 |
| Suffolk | | | |
| Acton | 1404-1430 | 12 | TNA, SC 6/989/10-990/2 |
| Sussex | | | |
| Alciston ^B | 1401-1495 | 84 | ESRO, SAS/G44/56-139 |
| Apuldram ^B | 1421-1463 | 36 | TNA, SC 6/1017/17-1019/20 |
| Lullington ^B | 1400-1465 | 55 | TNA, SC 6/1025/10-1027/16 |
| Wiltshire | | | |
| Bromham ^B | 1401-1439 | 19 | TNA, SC 6/1046/12-1047/20 |
| Downton ^W | 1400-1430 | 20 | HRO, 11M59/B1/150-163, 168-174 |
| Ebbesbourne ^W | 1400-1454 | 37 | HRO, 11M59/B1/150-191 |
| Longbridge Deverill ^G | 1420-1490 | 57 | SHC, T\PH\lon/2/6/9815-6, 9818-21, 9823-6, 9829, 9830-3, 9835-41, 9869-70, 9872, 9874-7, 10613, 10615, 10708-9; T\PH\lon/2/7/9940-2, 9944-62, 9964 |
| Longbridge Deverill Parsonage ^G | 1401-1452 | 43 | SHC, T\PH\lon/2/8/9605-9617, 9636, 9843-9853, 9855-9861, 9864, 9868, 9884, 10611, 10614, 10664, 10706-7; T\PH\lon/2/9/9814, 9854, 9862-3, 9865 |
| Monkton Deverill ^G | 1402-1480 | 57 | SHC, T\PH\lon/2/10/9692-9695, 9697-9705, 9720, 9822, 9873, 9880-1, 10625, 10721-2; T\PH\lon/2/11/9707-9719, 9793-9804, 9813, 9827, 9834, 9882-3, 9998-10000, 10626, 10717-10719, 10726 |
| Worcestershire | | | |
| Broadway | 1404-1432 | 5 | TNA, SC 6/1065/8, 9, 21, 6/1066/1, 3 |
| Hewell | 1424-1458 | 8 | TNA, SC 6/1068/11-19 |

Note: Account rolls that do not contain useful information for this research are omitted.

B: Battle Abbey estate; D: Durham Priory estate; G: Glastonbury Abbey estate; N: Norwich Priory estate; T: Tavistock Abbey estate; W: Winchester estate.

Abbr: DRO: Devon Record Office; ESRO: East Sussex Record Office; HRO: Hampshire Record Office; NRO: Norfolk Record Office; SA: Shropshire Archives; SHC: Somerset Heritage Centre (formerly the Somerset Record Office); TNA: The National Archives.

arable in Wiltshire during the fifteenth century.⁸⁶ And even in the seigniorial sector, cultivation was scaled down on the demesnes managed by the landlord. Campbell has demonstrated that on the Norwich Priory's estate where cultivation in the seigniorial sector in the 1400s was 71% as large as the 1300 level; the percentage fell to 38% two decades later; and by 1450, cultivation had completely disappeared.⁸⁷ How this sample may be used to illustrate a broader picture of English agriculture is a critical question that has to be addressed.

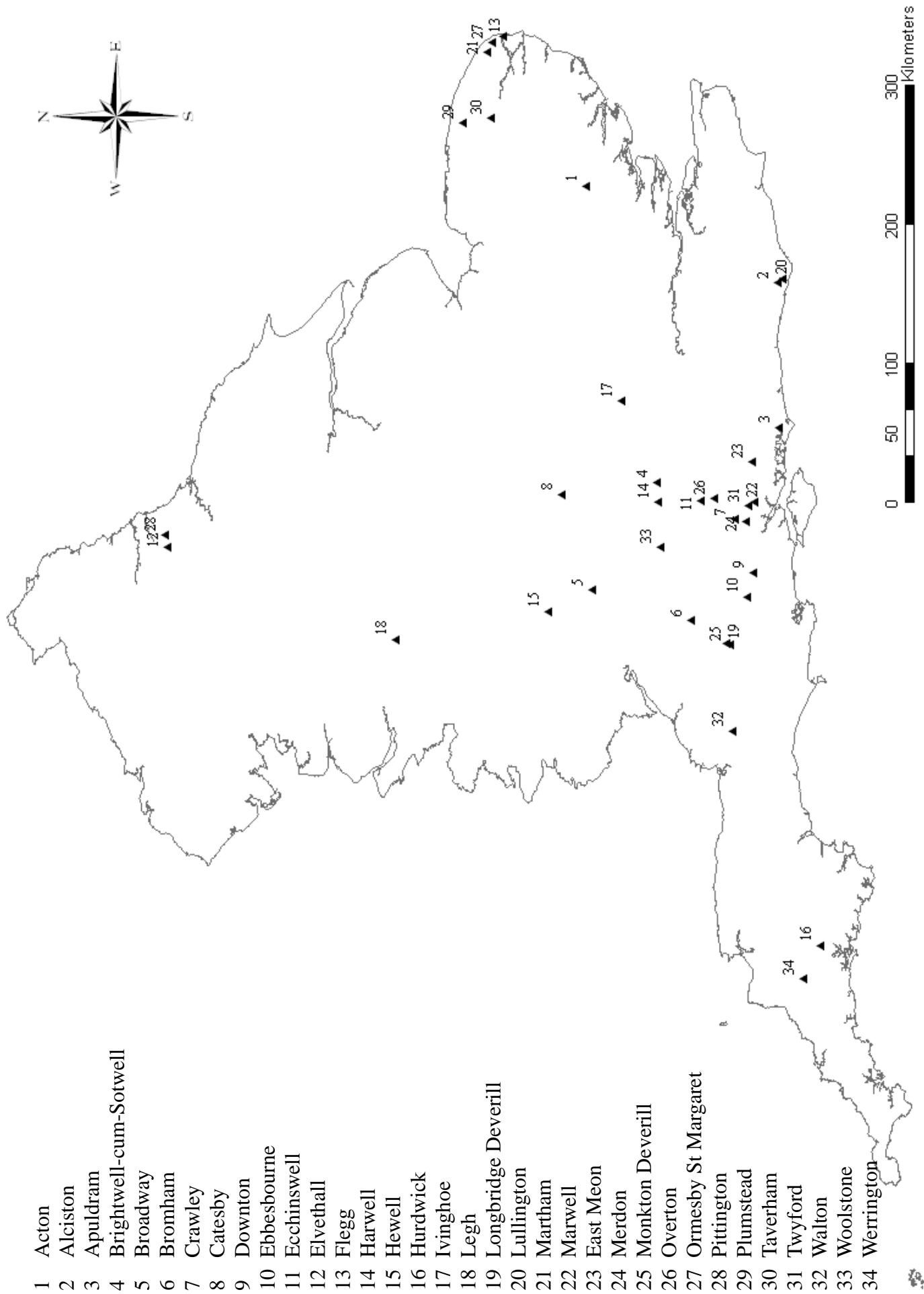
Geographical distribution of the sample is another limitation. As illustrated in Map 2.1, the sample is concentrated in Southern England, especially in Hampshire and Wiltshire, where the Winchester estates were situated. Norfolk has five demesnes from which records survive; the sample in the Midlands is weaker; and the weakest area is the North that has only two demesnes. Increasingly, the distribution of the sample becomes even more biased and ends up limited to Sussex, Wiltshire, the Southwest, and Durham in the latter half of the fifteenth century. The sample exhibits significant varieties of crop system and soil quality. On the five demesnes in Norfolk barley was the main crop largely produced for brewing.⁸⁸ In Coastal Sussex, the

⁸⁶ J. N. Hare, *Lords and tenants in Wiltshire, c. 1320 – c. 1520* (unpublished PhD dissertation, University of London, 1975), pp. 37-40.

⁸⁷ Campbell, *English seigniorial agriculture*, pp. 56-60.

⁸⁸ For example, in 1437, at Ormesby St Margaret, 303qrs of barley were threshed and handed in to the malt house before the heavy winter; TNA, SC 6/939/12. Campbell, *English seigniorial agriculture*, pp. 290-301.

Map 2.1 Sample manorial demesnes



alluvial soil was so fertile that fallow-ploughing was not needed.⁸⁹ In Hampshire and Wiltshire, sheep farming was important on the Winchester estate and the Glastonbury estate. On the estate of Durham Priory at Pitlington and Elvethall, reversely, they did not keep sheep flocks. The sample allows us to learn about local patterns, but it is unlikely that a general system can be reconstructed on a regional or a national basis.

The sample represents merely a tiny part of the country. Yet it is impossible to reconstruct a national picture of agricultural wage labour in remote history. It is the historian's responsibility to deal with fragmentation in source material and to present meaningful conclusions, like the theoretical framework built on the purchasing power of one day's wage being used to interpret the changes in population or like the framework based on money supply to interpret the trends in prices and wages.⁹⁰ The purpose of this present research is modest. The research is intended to find out the rationality in wage labour management using a particularly rich medieval source. The findings may thereafter be expanded to cover the wide economy by means of economic laws and agricultural practice. There is, however, a problem that must be addressed before we proceed with the purpose – the possible variation in labour management between different types of estate. It is a major problem because it has been understood that in the seigniorial sector the workforce was managed in a rather

⁸⁹ P. F. Brandon, 'Demesne arable farming in coastal Sussex during the later middle ages', *Agricultural History Review*, 19 (1972), pp. 125-126.

⁹⁰ Postan, 'Some economic evidence', pp. 221-246; N. J. Mayhew, 'Population, money supply, and the velocity of circulation in England, 1300-1700', *Economic History Review*, 2nd ser., 48 (1995), pp. 238-257.

different manner from in the non-seigniorial one.⁹¹ This problem may be approached from three aspects: the use of political privileges, the composition of the workforce, and the combination of the two.

The first political privilege in question is the intention to regulate the wage to secure cheap labour by means of wage regulations. Evidence, however, shows that employers of other classes were as keen to have a grip on the labour market as were the lords. As stated by Britnell, '[c]oncern for high prices was a general preoccupation of medieval landlords, great as well as small.'⁹² The petition seeking the regulation of the labour market in 1368 was presented by those 'who do not have lordships or villeins to serve them'.⁹³ It is probable that wealthy villagers were involved because they had always been keen to regulate the village labour market.⁹⁴ Secondly, during the late fourteenth and the fifteenth century, the wage offered in the seigniorial sector did not seem to be lower than in the non-seigniorial sector. In 1388, the mowers that were paid 6d for mowing for villagers were convicted in Louth'sk (Oxon.).⁹⁵ 6d per acre was illegal according to the statute of labourers in 1351 and accepted in 1445/6

⁹¹ E. A. Kosminsky, 'The evolution of feudal rent in England from the 11th to the 15th centuries', *Past and Present*, 7 (1955), pp. 23-27.

⁹² R. H. Britnell, 'Minor landlords in England and medieval agrarian capitalism', *Past & Present* 89 (1980), p. 21.

⁹³ C. Given-Wilson (ed.), *The parliamentary rolls of medieval England 1275-1504*, v (Woodbridge, 2005), pp. 211-2.

⁹⁴ C. Dyer, *Standards of living in the later middle ages: social change in England c. 1200 – 1520* (Cambridge, 1989), p. 219; W. O. Ault, *Open-field husbandry and the village community: a study of agrarian by-laws in medieval England* (Philadelphia, 1965), pp. 27-34.

⁹⁵ E. G. Kimball (ed.), *Records of some sessions of the peace in Lincolnshire 1381-1396*, v. 2 *the parts of Lindsey*, *The Lincoln Record Society* (1962), p. 112.

to be the legal wage rate of mowing.⁹⁶ Yet in 1380, mowing an acre of rush on the demesne of Norwich Cathedral Priory at Ashby, Norfolk, was paid 12*d*; and mowing on the estate of Durham Priory at Pitlington was paid 8*d* in 1377.⁹⁷ The comparison illustrates that magnates were neglecting the law and paying high wage rates, whilst villagers were convicted for marginal infringement. Moreover, '4*d* and food each day' was entered into village by-laws at Great Horwood, Bucks., in 1406.⁹⁸ This same wage rate, roughly equal to '10*d* each acre', was the ordinary harvest wage rate used in other places seigniorial or non-seigniorial since the late fourteenth century.⁹⁹ The implication is that the manorial demesne was sharing the same labour market with villagers without imposing feudal privileges on wage rates.

The other privilege relates to the composition of the workforce. It is known that customary labour was specific to the seigniorial sector, but in the fifteenth century it was hardly a major element of the workforce. It has been reported that Westminster Abbey attempted to re-impose labour services to secure labour supply in the wake of the Black Death, but the attempt was not successful in the long run. Around 1400, most labour services were commuted or released; and the labour force was replaced

⁹⁶ *SoR*, i, p. 311; *SoR*, ii, p. 338.

⁹⁷ Norfolk Record Office (hereafter NRO), DN/EST 9/1; DCDM, PAR 1376/7.

⁹⁸ Ault, *Open-field husbandry*, pp. 55, 72, 80, 95.

⁹⁹ R. H. Hilton, *The English peasantry in the later middle ages* (Oxford, 1975), pp. 48-52, 54-57; idem, 'Agrarian class structure and economic development in pre-industrial Europe: a crisis of feudalism', *Past & Present*, 80 (1978), p. 9; L. R. Poos, *A rural society after the Black Death: Essex 1350-1525* (Cambridge, 1991), p. 216; D. Youngs, 'Servants and labourers on a late medieval demesne: the case of Newton, Cheshire, 1498-1520', *Agricultural History Review*, 47 (1999), p. 158.

by paid labour on the estate.¹⁰⁰ Similarly, by c. 1400, labour services had largely disappeared from the seigniorial sector on the estate of Ramsey Abbey.¹⁰¹ In other places, customary labour was persistent but its importance was dwindling. The estates of the bishops of Winchester were the only important employers of it in the fifteenth century.¹⁰² On some other demesnes, like Elvethall, Alciston, and Hurdwick, there was no customary labour in this century. On these manorial demesnes, farming operations completely relied on paid labourers; and even the managers themselves were hired villagers. Therefore, as far as the types of labourer are concerned, except a few manorial demesnes that still extensively used customary labour, there should be little difference between the manorial demesne and the non-seigniorial farm.

Available evidence allows us to take a peek at the composition of the workforce between different types of farm, which, as should be distinguished from the peasant's holding, refers to a larger arable entity. Two unique accounts have been presented by D. Youngs and L. R. Poos illustrating a pattern of hiring on gentry farms. Youngs has observed that on Humphrey Newton's estate that had about 100 acres of arable land in Cheshire, the workforce included around five servants employed for an extended period, usually a year, and salaried. It also included day labourers, employed to take

¹⁰⁰ B. F. Harvey, *Westminster Abbey and its estates in the middle ages* (Oxford, 1977), pp. 256-261, 269-271.

¹⁰¹ J. A. Raftis, *Peasant economic development within the English manorial system* (Montreal, 1996), pp. 47-62, 118-119.

¹⁰² P. D. A. Harvey, 'Tenant farming and farmers: the Home Counties', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 667-668. A detailed examination of the extensive use of labour services on the Winchester demesnes will be given in Chapter 4 of this dissertation.

on casual tasks, especially in the harvest. They were paid by piece-work.¹⁰³ Poos has illustrated a similar composition on William Capell's farm at Porter's Hall, Essex. Capell had about 300 acres under crops in 1483/4. On the estate, he employed eleven year-round servants and 52 day labourers who worked for a few days in seasonal operations in that year.¹⁰⁴ This arrangement is simple and reasonable. In agriculture there are continuous tasks that require regular attendance; and there are also seasonal surges in workload that require temporary work. Hence two types of labourer were employed. This pattern is exactly the same as on the manorial demesne farm. On the demesne, the *famuli* were hired to take on continuous responsibilities and salaried;¹⁰⁵ and day labourers were employed to work in mowing, threshing, the harvest and other tasks.¹⁰⁶ At Ormesby St Margaret in 1434/5, for example, the manorial demesne used 12 *famuli*; and 40 casual labourers were employed in the harvest, three men were hired in mowing, 72.5 man-days in winnowing and an unknown number of labourers were hired for threshing.¹⁰⁷ It is worth mentioning that the Porter's Hall account seems to keep the cost of labour in a similar manner as the manorial account, by categorising it into the servants' salary, the cost of harvest, of threshing, of sowing and harrowing, and of miscellaneous work.¹⁰⁸ The implication is that agriculture is rigidly

¹⁰³ Youngs, 'Servants and labourers', pp. 148-153, 157-158.

¹⁰⁴ Poos, *A rural society*, pp. 212-216.

¹⁰⁵ Postan, *The famulus*, pp. 16-17, 31; Farmer, 'The *famuli*', pp. 211-214.

¹⁰⁶ Farmer, 'Prices and wages, 1350-1500', pp. 467-474, 480-483.

¹⁰⁷ TNA, SC 6/939/10.

¹⁰⁸ The pattern of accounting is implied in Poos's chart. I have not read the Porter's Hall account personally. See,

regulated by Nature. Labour is used to satisfy continuous and periodical demands, despite the type of farm. Over time, the dualistic composition of the workforce and periodical hiring were developed to be a managerial strategy used by husbandmen of various classes.

A possible difference in the composition exists in the employment of permanent labourers, but it is disputable. Youngs suggests that the servants on the gentry's farm were different from 'conventional definitions of *famuli*' and that the 'servants' were more similar to the early modern pattern than the medieval *famuli* found on the seigniorial demesnes considered for this project.¹⁰⁹ She elaborates that some of the servants were young and living in the employer's household and that many of them 'were not confined to soil and animals as *famuli*, but undertook tasks generally assigned to the household servant'.¹¹⁰ However, firstly, it is possible to find similar patterns of employing the *famuli* in the seigniorial sector. In the Ormesby St Margaret account, the *famuli* were boarding in the household.¹¹¹ They should either live there or in nearby cottages, so that they did not have to make a long trip in the night and in the early morning. This possibility has been discussed by H. S. A. Fox in a study of farmworkers' accommodation.¹¹² As for young servants, evidence from the *Hundred*

Poos, *A rural society*, p. 214. As for the pattern in the manorial account, please see the following discussion.

¹⁰⁹ Youngs, 'Servants and labourers', pp. 146, 149-152. The early modern pattern is elaborated by Kussmaul, see A. Kussmaul, *Servants in husbandry in early modern England* (Cambridge, 1981), pp. 40-48

¹¹⁰ Youngs, 'Servants and labourers', pp. 151-152.

¹¹¹ 'In liberationibus famulorum nichil quia omnes ad mensam domine hoc anno', TNA, SC 6/939/11;

¹¹² H. S. A. Fox, 'Farmworkers' accommodation in later medieval England: three case studies from Devon', in D.

Rolls collected by Kosminsky says that in Oxfordshire in the late thirteenth century a villager asked the lord to let his sons serve on the demesne for allowances and stipends.¹¹³ In parliamentary legislation in 1445/6, the salary paid to child servants was included in the regulations together with regular posts of the *famuli*.¹¹⁴ As for work done by the *famuli*, evidence shows that they did carriage and driving cattle from one place to the other apart from ordinary responsibilities.¹¹⁵ Indeed, little has been found relating to the *famuli* engaged in ditching, faggoting, and domestic tasks in the manorial account, but this is a limitation of the accounting practice that did not record unpaid activities, rather than a genuine characteristic of employing the *famuli*. Secondly, Newton's accounts provide but a few hints that allow speculations, such as William Hough, who 'was sometimes dwelling' in the household working as a servant until married, and such as James Hough, who was the only 'identified child' in the accounts.¹¹⁶ Further evidence is difficult to find from the non-seigniorial sector from the middle ages to provide more details. In particular, the Porter's Hall account gives only names, periods, and salaries of the servants, like an ordinary seigniorial account does; but, as suggested by Poos, the servants should reasonably do all those essential

Hooke and D. Postles (eds.), *Names, time and place : essays in memory of Richard McKinley* (Oxford, 2003), pp. 129-164.

¹¹³ Kosminsky, *Studies in the agrarian history of England*, pp. 292-293.

¹¹⁴ *Statutes of the Realm*, 2, pp. 57, 338.

¹¹⁵ For example, at Pittington, '*famuli manerij predicti fuerunt occupati in diversis caracionibus domini ibidem tunc existentis in ludo ad festum Nativitatis Sancti Johannis Baptiste predicti*', see DCDM, PAR 1405/6; and at Alciston, '*Et in rewardeo facto famulis domini pro bladis carandis usque Lyme et pro averialibus porci ancaram caponaram et columbellarum carandis usque Bellum hoc anno*', ESRO, SAS/G44/103.

¹¹⁶ Youngs, 'Servants and labourers', p. 151.

tasks.¹¹⁷ The flimsy evidence prohibits us from establishing robust patterns for either the seigniorial or the non-seigniorial sector. Since similarities between the two can be found, it is doubtful if Youngs's pattern of farm servants in the non-seigniorial sector was distinct in comparison with the *famuli* in the seigniorial sector.

A real difference in the management of the workforce is found on the average peasant's holding, where the peasant had to do physical labour. A virgater that had 30 acres needed around 75 man-days to reap the crops.¹¹⁸ Hiring for him was necessary. A half-virgater would hire if his household could not cope with the work. These employers hired to help themselves in physical labour. In this sense they might be considered as permanent workers on their own holdings. On the other hand, they were not the type of permanent worker on the large farm. The size of holding required much less labour for ploughing in comparison with the average input of the *famulus*, i.e. 66.6 acres, estimated by Campbell.¹¹⁹ Equally, less labour was required in other operations. The work left him plenty of time to pursue casual hire and the peasant employer would work for hire when necessary.¹²⁰ In 1372, for example, a yardlander in Staffordshire reportedly broke an agreement of doing carriage for a neighbour.¹²¹

At Monkton Deverill, in the early fifteenth century, several *famuli* on the manorial

¹¹⁷ Poos, *A rural society*, pp. 213, 215.

¹¹⁸ E. Lamond (trans. and ed.), *Husbandry. Together with an anonymous Husbandry, Seneschauscie and Robert Grosseteste's Rules* (London, 1890), p. 69.

¹¹⁹ Campbell, *English seigniorial agriculture*, p. 121.

¹²⁰ M. Mate, 'Tenant farming and tenant farmers: Kent and Sussex', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 696-697.

¹²¹ Hilton, *The English Peasantry*, p. 51.

demesne were half-virgaters.¹²² Whilst on the large farm and on the manorial demesne, labourers were hired to take care of crops, cattle, and relevant facility, on the peasant's holding, both hiring and being hired meant to maintain the household. These were different economies, and should be distinguished. Reasonably, although following the same cycle of demand for labour as on the large farm, on the peasant's holding most demand was satisfied by the peasant and the household. The limited resources that urged the peasant and the household to seek for casual opportunities could not afford much hired labour. In the open-field system, the peasant might even work with his neighbour in the operations that required special tools like ploughs and plough-beasts.¹²³ These arrangements left little space for hired labour, which, if used, should mostly be used in the harvest. Thus, even if a peasant's account were available, it would be unlikely to provide substantial details of wage labour and it would not illustrate the labour input of the peasant and his household.

It would be over-ambitious to apply the data from manorial demesnes to English agriculture in general for the fifteenth century, but the fact that agriculture is an industry regulated by Nature allows the source material to be exploited bypassing different types of farm. At first, the wage labour on the gentry's farm and on the manorial demesne might be considered equally, because on both types of farm the

¹²² Farmer, 'The *famuli*', pp. 227-231.

¹²³ Hilton, *English Peasantry*, pp. 49-50.

combination of servants and casual labourers was used to tackle both continuous tasks and fluctuations in demand. It could be argued that the gentry tended to keep a close eye on the farm and acquired better outcomes; but equally it could be argued that labourers hired on the manorial demesne were more specialised and working more efficiently.¹²⁴ As far as evidence allows, there is no clear reason to distinguish the two. Moreover, the gentry farm and the manorial demesne were major agricultural employers in the village. The demand for labour on their farms reflects a general pattern of the availability of job opportunities. The farming cycle further suggests that both types of employer should act in a similar manner. Although the source material cannot reveal how a common peasant arranged the workforce on his holding, it predicts when he had to invest labour power and how much he had to put in, because peasant agriculture was probably conducted in the same manner as its wealthy neighbours' farms.¹²⁵ The similarities mean the evidence from manorial demesnes casts some light on wider aspects of the demand for agricultural labour.

¹²⁴ Britnell, 'Minor landlords', pp. 18-20; C. Dyer, 'A small landowner in the fifteenth century', *Midland History*, 1 (1971-2), no. 3, pp. 1-2; M. M. Postan, 'Medieval agrarian society in its prime: England', in M. M. Postan (ed.), *The agrarian life in the middle ages. The Cambridge economic history of Europe*, 1 (Cambridge, 1966, 2nd edn), pp. 595-600; R. C. Allen, 'The growth of labor productivity in early modern English agriculture', *Explorations in Economic History*, 25 (1988), pp. 130-135.

¹²⁵ This assumption may be questionable, but there is not much evidence to support the idea that peasants cultivated the lands in a particular way. See, Dyer, *Standards of living*, pp. 128-129.

2.2 Elements of wage labour in the manorial account

Table 2.2 The manorial account roll of Elvethall, Durham, 1447/8

| | |
|-------------------------|--|
| | 1. Account of John Coll the reeve of Elvethall from Pentecost 1447AD to the same feast 1448AD. |
| Arrears | 2. None as it shows in the account of the previous year. 3. Total 0. |
| Sale of grain | 4. And he renders account for 40s received from 8qrs wheat sold to the Bursar of Durham. 5. And for £17 13s 4d received from 106qrs barley sold to the Bursar of Durham at the price of 3s 4d per quarter. 6. And for 43s 4d received from 13qrs barley sold to Agnes Plumber at the price of 3s 4d per quarter. 7. And for 26s 8d received from 8qrs barley sold to Bethany Hunton at the price of 3s 4d per quarter. 8. And for 33s 4d received from 10qrs barley sold to John Coll at the price of 3s 4d per quarter. 9. And for 32s received from 16qrs rye sold within the period of this account at the price of 2s per quarter. 10. And for 53s 4d received from 32qrs oats sold. 11. And for 16s 8d received from 5qrs barley sold to various persons. 12. Total £29 18s 8d. |
| Foreign receipts | 13. And for 30s received from 4 oxen sold to the Bursar of Durham in gross. 14. And for 26s 8d received from 300 thraves of straw, which were purchased from the same manor this year. 15. And for 18d received from 6 piglets, which were purchased from the same manor. 16. And for 10d received from 1 oxhide sold to John Henryson. 17. Total 59s. 18. Total of all receipt £32 17s 8d. Of which (as original) |
| Cost of ploughs | 19. The same account reckons in the payment to Henry Bowuran for 11 stones of iron from Weardale for the manor's use – 4s 6d. 20. And paid to Richard Smith for working with the said iron for the maintenance of iron tools, 2.5d paid for each stone – 2s 3.5d. 21. And paid for bars bought for the maintenance of the leaves of one door of the same grange – 2d. 22. And paid to Nicholas Wright for the maintenance of ploughs and other necessities of the same manor – 18d. 23. Total 8s 0.5d. ¹²⁶ |
| Threshing and winnowing | 24. <i>And paid to Patrick Pereson and Thomas Grene for threshing 8qrs wheat at 4d each – 2s 8d.</i> 25. <i>And paid to William Henrison for threshing 98qrs barley at 2d each – 16s 4d.</i> 26. <i>And paid to Margaret Whynfell and Johanna Gibson for winnowing all grains of the manor this year according to the contract with them, in gross – 8s.</i> 27. Total 27s. |

¹²⁶ It should be 8s 5½d.

| | |
|--------------------|--|
| Weeding and mowing | <p>28. <i>And in weeding grains, namely, Margaret Whynefell, 10d.</i></p> <p>29. <i>And paid to Robert Andrewson and 4 his companions for mowing 7 acres meadow at Langinerdike – 4s 1d.</i></p> <p>30. Total 4s 11d.</p> |
| Cost of the autumn | <p>31. <i>And in expense of the autumn made in purchase of bread, cheese, and beer; and the cost of all other operations related to gathering, carrying and bringing in corn of the manor; and 12d given to farm servants in the feast of Inninggoose and for the breakfast on the day of ploughing – 115s 8d.¹²⁷</i></p> <p>32. Total 115s 8d.</p> |
| Wage of the famuli | <p>33. <i>And in wages of the famuli over the period of this account, namely, John Coll, 20s, the carter 20s, and five others each of them 16s – £6.</i></p> <p>34. Total £6.</p> |
| Purchase of oxen | <p>35. <i>And paid for 5 oxen bought for the manor's use – 50s.</i></p> <p>36. Total 50s.</p> <p>37. Total of all expenses – £16 5s 7.5d.</p> <p>38. Account of John written in overleaf of outcome of the said manor over the said period.</p> |
| Wheat | <p>39. Firstly, he answers for 7qrs wheat received from the surplus of the account of previous year.</p> <p>40. <i>And for 43qrs 3bu wheat received from the whole issue of the grange within the period of this account.</i></p> <p>41. Total, 50qrs 3bu.¹²⁸</p> <p>42. <i>Of which he reckons in seed this year 9qrs 4bu.</i></p> <p>43. <i>And in the grain deliveries given to 5 famuli over the period of the account, namely, 50 weeks, each person receives for every three weeks a bushel with mixture of rye – 10qrs 5bu.</i></p> <p>44. <i>And in the grain delivery given to the accountant over the period of the account each week a bushel – 6qrs 2bu.</i></p> <p>45. <i>And to the forester of the same over the same period receiving for each 3 weeks 2 bushels – 4qrs 2bu.</i></p> <p>46. <i>And to the carter of the same receiving for each 3 weeks with mixture of rye, a bushel – 2qrs 1bu.</i></p> <p>47. <i>And in the grain delivery to Richard Smith for sharpening iron tools over the period of the account – 2bu.</i></p> <p>48. <i>And in the grain delivery to the plumber for the maintenance of the aqueduct over the same period – 2bu.</i></p> <p>49. <i>And in the grain delivery to Boy Bishop of Elvet – 2bu.</i></p> <p>50. <i>And in the grain delivery to Robert Andronson of Shincliff – 3bu.</i></p> <p>51. <i>And in the grain delivery to William Barrett of the same town by the order of Hosteller 4bu.</i></p> <p>52. <i>And in the sale as written in overleaf, 8qrs.</i></p> <p>53. Total, 42qrs 3bu, and surplus 8qrs.</p> |

¹²⁷ The *inninggoose*, or *inning goose*, as recorded in the item of the autumn work, is probably the Michaelmas goose, which was a traditional cuisine served in the feast of Michaelmas. *Jantaculam*, or *ientaculam*, was the breakfast served to ploughmen on the first day of the winter ploughing.

¹²⁸ 1 quarter (qr.) = 8 bushels (bu.). The measure might change even on the same demesne; see Brandon, 'Cereal yields on the Sussex estates', p. 411.

| | |
|--------|---|
| Rye | <p>54. In the surplus of the previous account, none, because none remains.</p> <p>55. <i>But he answers for 41qrs received from the whole issue of the grange within the period of the account.</i></p> <p>56. Total, 41qrs.</p> <p>57. <i>Of which he reckons in seed this year 4qrt 4bu.</i></p> <p>58. <i>And in the grain deliveries given to 6 famuli each taking for each 3 weeks a bushel of rye with mixture of wheat as above stated – 12qrs 6bu.</i></p> <p>59. And in the sale as written in overleaf – 16qrs.</p> <p>60. Total, 33qrs 2bu and surplus 8qrs.</p> |
| Barley | <p>61. In the surplus of the previous account, none.</p> <p>62. <i>But he answers for 160.5qrs of barley received from the whole issue of the manor this year.</i></p> <p>63. Total, 160.5qrs.</p> <p>64. <i>Of which the same accountant reckons in seed this year – 14.5qrs.</i></p> <p>65. And the sale as written in overleaf – 142qrs.</p> <p>66. And sending into the brewer for consumption in the harvest – 4qrs.</p> <p>67. Total as above; and it is even.</p> |
| Oats | <p>68. In the surplus of the previous account, none.</p> <p>69. <i>But he answers for 55qrs 4bu of oats received from the whole issue of the grange this year.</i></p> <p>70. Total, 55qrs 4bu.</p> <p>71. <i>Of which in seed this year – 19.5qrs.</i></p> <p>72. And for 32qrs of oats sold as written in overleaf.</p> <p>73. And for sending into the brewer for consumption in the harvest this year 4qrs.</p> <p>74. Total as above; and it is even.</p> |
| Oxen | <p>75. And for 24 oxen received from the surplus of the previous account as it shows.</p> <p>76. And for 5 oxen received from the purchase as written in overleaf.</p> <p>77. Total, 29.</p> <p>78. Of which for the sale as written in overleaf – 4.</p> <p>79. And dying in murrain, of which the meat rotten and worth nothing – 1.</p> <p>80. Total, minus 5; and surplus 24.</p> |
| Horses | <p>81. And answers for 4 horses received from the surplus of the previous account.</p> <p>82. Of which, one is stolen.</p> <p>83. Total 4; equal to 3.</p> |
| Boars | <p>84. And for one boar received from the surplus of the previous account.</p> <p>85. And for 1 swine received from the surplus of the previous account.</p> |

Note: The Italicised items are the items related to agricultural labour, directly or indirectly, as will be cited below.

Source: DCDM, EAR 1447/8.

The Elvethall account is a typical fifteenth-century manorial account without the record of rent, because during this period this manor did not own rent. It is separated into the account of 'due' cash income (Items 2-18), the account of cash expense (Items 19-38), the account of grain (Items 39-74), and the account of stock (Items 75-85). Variations in accounting practice should be borne in mind. The accountant recorded charges and discharges of the demesne's assets, not the detail of personnel and farming operations.¹²⁹ Preservation of details is determined by the local practice or by the accountants, varying significantly from one demesne to the next. In the Elvethall example the wage rates of threshing are given in addition to the total cost of labour; and in the cost of the harvest only the amount of total cost is provided. Just three miles away at Pittington the accountant tended to specify the cost of harvest labour a little bit more precisely, like 'And paid for the wage of 238 men and women employed to reap, collect and bind grains as if 4*d* per day except the drink, total 79*s* 4*d*' in 1427/8.¹³⁰ But it was simplified in 1446/7, when the accountant gave a mere summary saying 'And paid for the autumn wage (*pro stipendijs autumpnalibus*)'.¹³¹

The most detailed record of the harvest labour in our sample is found in the account of Ormesby St Margaret and of Catesby, in which the names of workers, the numbers of day they worked, the terms of employment, and the foodstuffs served in the harvest

¹²⁹ There is one exception...

¹³⁰ Dean and Chapter of Durham Muniments (hereafter DCDM), Pittington Account Roll (hereafter PAR) 1427/8.

¹³¹ DCDM, PAR 1446/7.

meal are recorded in addition to the cost of wage.¹³² It is difficult to sort the sample accounts into patterns, due to considerable regional variations and even the variation observable on the same demesne. Variations certainly limit the use of the sample. In order to make the best of it, basic information like wage rates is extracted to expand the sampling basis for quantitative analyses; and detailed records, where available, will be gathered for detailed examination of the workforce.

In summary, because the casual wage data only stand for the price of a piece of work, it is easy to conceive the limitations of that source material in studying wage labour. In the beginning of the discussion I intend to demonstrate those limitations. Following up, the demand for labour will be explored as deeply as possible. Whilst the wage rate indicates the price level of labour power, it gives a vague message of the balance between supply and demand when the demand side has not received proper attention from historians yet. This preliminary attempt is intended to gather relevant data from the items of the amount of work done by casual labourers and the amount of work that had to be finished, e.g. total amount of grain threshed by all types of labourer. Thirdly, as long as the labour input of one type of labourer is given, it is possible to estimate the comparative importance of it; and the more data of labour input are available the more we may understand the other types' importance. This attempt shall start with the input of casual labourers that is usually recorded and

¹³² For example, TNA, SC 6/939/1, SC 6/946/24.

expand to the others wherever information available. Fourthly, the activities of the *famuli* deserve more consideration than it has been known in existing studies. The data related to two aspects of this type of labourer will be collected. On the one hand, as the other type of paid labourer working along with casual labourers, collaboration between the two may be suitable for quantitative analyses, as will be illustrated; on the other, their salaries provide a potential source material for constructing wage series like the existing one, but representing a different dimension of wage labour. Fifthly, the employment of labour services is critical for understanding wage labour, because it is a major negation to the use of paid labour; as more labour services are employed less paid labour is demanded. Over this century, the use of labour services is suggested to have been reducing. This set of data provides us with a chance to learn how the substitution happened. As far as the source material allows, complexities are purposely sought to demonstrate the potential of the data. The complexities will be simplified and modelled in the next section.

Regarding the limitations of casual wage evidence, this sample shows that wage rates are hardly an indicator of the labourer's income in an operation. In the published wage series, the wage rate is presented by, for example, 'threshing and winnowing three quarters of grain, one of each of wheat, barley, and oats'.¹³³ In the original

¹³³ Farmer, 'Prices and wages, 1350-1500', p. 469; W. Beveridge, 'Wages in the Winchester manors', *Economic History Review*, 2nd ser., 7 (1936), p. 38.

record, the accountant usually broke the pay into wages of sub-tasks, like illustrated in Items 24 and 25 and in Table 2.3. The difference between sub-task wage rates may represent how fast a labourer threshed a certain type of grain, so that he earned roughly the same by the day. Thus, the combined wage rate in the published wage series overlooks the amount of labour input embodied in the sub-task wage rate. A more important weakness of the wage rate – the incapability of representing income – is revealed when the detail is available. Table 2.4 is composed using the cost of harvest labour on the Ormesby St Margaret manorial demesne, where the income of the labourer varied considerably. Many of them earned a few shillings, *e.g.* Roger Note earning 2*s* for working 8 days, at a wage rate between 3*d* and 4*d* per day, or between 7*d* and 8*d* per acre for mowing. It is worth noting that a woman labourer, Isabelle Colyn, earned 4*s* in this operation, more than many of her male co-workers did, because she was able to work for 16 days. At Catesby, Margery Liburi worked 24 days in several sub-tasks in 1449 and received 4*s* 8*d*; and Emma Bene worked 25 days and received 5*s* 2*d* more than male workers did on that demesne.¹³⁴ In Table 2.4, some mowers made a small fortune due to the amount of mowing work they took on, in sharp contrast to Alex Harsond, who mowed only one acre of peas.¹³⁵ A few labourers did more than one task, like John Deye, who reaped for 6 days earning 22*d*

¹³⁴ TNA, SC 6/946/24.

¹³⁵ Robert Dykerd was apparently the leader of a team. Mowing an acre of corn took roughly one day. The 60 acres would take him two months that exceeded the limit of the six-week period.

| Table 2.3 The sub-task wage rates of the threshing operation | | | | | | |
|--|-------|-----|--------|------|------|--|
| Raw wage data (threshing each quarter of grain, unit: pence) | | | | | | |
| Demesne | Wheat | rye | barley | oats | peas | |
| Berkshire | | | | | | |
| Brightwell 1409/10 | 3 | - | 2½ | 2½ | - | |
| Harwell 1409/10 | 3 | - | 2 | - | - | |
| Woolstone 1416/7 | 3 | - | 2 | 1½ | 3 | |
| Buckinghamshire | | | | | | |
| Ivinghoe 1409/10 | 3 | - | 2 | 1½ | - | |
| Cornwell | | | | | | |
| Werrington granary 1453/4 | 4 | - | - | 2 | - | |
| Devonshire | | | | | | |
| Hurdwick 1463/4 | 6 | 5 | - | 2 | - | |
| Durham | | | | | | |
| Elvethall 1447/8 | 4 | - | 2 | - | - | |
| Pittington 1413/4 | 4 | - | 3 | 2 | - | |
| Hampshire | | | | | | |
| Crawley 1409/10 | 3 | - | 2 | 1½ | 3 | |
| Ecchinswell 1409/10 | 3 | - | 2 | 1½ | - | |
| Marwell 1447/8 | 3 | - | 3 | 1½ | - | |
| Meon 1409/10 | 3 | - | 2 | 1½ | 3 | |
| Overton 1409/10 | 3 | - | 2 | 1½ | 3 | |
| Twyford 1409/10 | 3 | - | 2 | 1½ | 3 | |
| Norfolk shire | | | | | | |
| Flegg 1426/7 | 5 | - | 3 | 3 | 5 | |
| Martham 1419/20 | 4 | - | 3 | 3 | 4 | |
| Ormesby St Margaret's 1437/8 | 5 | - | 2½ | 2½ | 5 | |
| Plumstead 1418/9 | 4 | 4 | 3 | 3 | - | |
| Taverham 1416/7 | 4 | 4 | 2½ | - | 4 | |
| Shropshire | | | | | | |
| Legh 1497/8 | 7 | 6 | - | - | - | |
| Suffolk | | | | | | |
| Acton 1409/10 | 4 | - | 2½ | 2½ | 2½ | |
| Sussex | | | | | | |
| Apuldram 1449/50 | 4 | - | 2 | 2 | - | |
| Wiltshire | | | | | | |
| Bromham 1417/8 | 3 | 3 | 2 | 2 | 2 | |
| Ebbesbourne 1449/50 | 3 | - | 2 | 1½ | - | |
| Worcestershire | | | | | | |
| Broadway 1432/3 | 3 | - | 2½ | 2½ | 2½ | |
| Sources: HRO, 11M59/B1/156; DRO, D52/1 Werrington granary 1453/4, D52/1 Hurdwick 1463/4, D52/1 Legh 1497/8; DCDM, EAR 1447/8, PAR 1413/4; NRO, DN/EST 9/18, NRS 20D2 5914, DCN 60/29/45, DCN 60/35/46; TNA, SC 6/758/4, SC 6/939/12, SC 6/989/13, SC 6/1018/24, SC 6/1046/19, SC 6/1066/3. | | | | | | |

Table 2.4 The record of the harvest labour on the Ormesby St Margaret demesne, Norfolk, 1434/5

The expenditure on the harvest

In expenditure for the bailiff Nicholas Harald, one woman Katrina Lychfeld known as the baker and brewer, two labourers on the manor, five ploughmen, Richard Richards, John Chirrene the thresher, five contracted workers for six weeks this year in the harvest, together with 104 man-days that accounted for harvesting 106¾ acres, as a part of 278¾ acres, of various grains, furthermore, the mowers, reapers, binders and collectors, that is, on bread, beer, meat, fish, milk, butter, eggs, cheese and other victuals bought for them and for their consumption as illustrated in this sheet of paper 4s, apart from 4qrs of wheat received from the stores worth 24s priced 6s each quarter, 14qrs of malt received from the stores worth 56s priced 4s each quarter, oat flour priced 20d, a half carcass of ox priced 11s from the stores, 12 carcasses of sheep priced 10s from the stores, [something] priced 3s 4d from the stores, 3 geese from the stores priced 9d, milk, butter and cheese from the stores 3s 4d; in 13 pairs of gloves purchased 17d, in one fork purchased 3d, in taps and spigots 3d, in wooden cups 3d.

Sum 6s 11d altogether by the bailiff.

The harvest wages

In the wage of Richard Halle hired for the whole harvest to mow the corn of the demesne 8s;
 In the wage of William Nudde hired for the same for the whole harvest 8s;
 In the wage of a man from Gatefeld hired for the same 7s 6d;
 In the wage of John Lymp- hired for the same 6s 9d;
 In the wage of Thomas Calyo from Pakefeld hired for the same 6s 8d;
 In the wage of five men from Pakefeld for 5 days 8s 6d, each of them received 4d each day and ate at the lord's table;
 In the wage of one man from Pakefeld for 2.5 days to reap the corn 10d;
 In the wage of two women from Pakefeld for the same for 2.5 days 20d, each day 4d;
 For them for their return (to home) by convention 3d;
 In the wage of one man of the large village Jermouth (Great Yarmouth) hired to mow the demesne's corn for 1 day 6d;
 In the wage of the wife of Roger Note for 8 days to reap the demesne's corn 2s, receiving 3d each day;
 In the wage of John Nudde hired for the same for 6 days 18d receiving 3d each day;
 In the wage of Isabelle Colyn hired for the same for 16 days 4s, receiving 3d each day;
 In the wage of Alice Pallyng for the same for 3 days 9d;
 In the wage of 3 women of the large village of Jermouth for the same for 1 day 9d;
 In the wage of one man from the same village for the same for 1 day 4d;
 In the wage of Walter Pallyng for the same for 12.5 days 3s 2d receiving 3d each day;
 In the wage of John Carter from Jermouth for the same for 5 days 20d receiving 4d each day;
 In the wage of Agnes Belli for two days for the same 6d;
 In the wage of John Deye for the same for 6 days 22d, each day 3½d plus 1d;
 In the wage of Margery Westgate for the same for 6.5 days 20d, each day 3½d plus 1d;
 In the wage of John Cros for 2 days for the same 6d;
 Paid to John Deye to mow 24 acres of barley 16s, each acre 8d;
 Paid Robert Dykerd to mow 60 acres of barley this year 40s, each acre 8d;
 Paid Richard Bere to mow 8 acres of barley 5s 4d;
 Paid Robert de Burgh to mow 12 acres of barley 8s, each acre 8d;
 Paid Stephen Ravnynham (Ravensingham) to mow 12 acres of barley 8s, each acre 8d;
 Paid William Wright to mow 12 acres of barley 8s, each acre 8d;

| |
|--|
| Paid Richard Bere to reap 4 acres of peas 2s 4d, each acre 7d; Paid to John Cros to reap 17 acres of peas 9s 11d, each acre 7d; Paid to John Spynk from Fylby (Filby) to reap 7 acres 4s 1d. each acre 7d; Paid to the same man from Burgh to reap 14 acres of peas 8s 2d; Paid Alex Harsond to reap 1 acre of peas 7d; In the wage of Peter Hernyng for the whole harvest 4s; In the wage of William Kyngid Norwico for the whole harvest 7s 1d. Sum £9 8s 8d by the Bailiff |
| Source: TNA, SC 6/939/10. |

and mowed 24 acres for 16s, showing that the labourers moved between tasks to increase the overall income during the season. Moreover, the Table shows that seven contracted harvesters worked for probably six weeks. Their daily average wage is likely lower than the daily wage rate, but over the six weeks the lump sum made them better paid workers. Those casual labourers who worked for a few days might or might not work elsewhere during the harvest season we will never know, but the cases illustrate that the length of work-period taken on by the labourer was a determinant of his income.

Certainly, when there was more grain to thresh or more crops to reap, there were more opportunities for labourers to find hire during the operation. The availability of casual job opportunities is, to a great extent, determined by the amount of demand for labour. As for threshing, the demand that was satisfied by casual labour is found in Items 24 and 25 in Table 2.2. Although the wage rate paid for threshing wheat, i.e. 4d per quarter, was higher than for barley, i.e. 2d, only 8qrs of wheat were threshed paying 2s 8d, in contrast to the threshing of 98qrs of barley, for which 16s 4d was

paid totally. In the following year, 7qrs of wheat, 128qrs 4bu of barley and 18qrs oats of were threshed, as each paying 2s 4d, 27s ¼d, and 3s 1d.¹³⁶ At Ebbesbourne, 54qrs of wheat, 99qrs of barley, and 25qrs 2bu of oats were threshed by casual labourers in 1433/4, paying 14s 6d, 16s 6d, and 3s 1½d; in the following year, 64qrs of wheat, 110qrs 2bu of barley, and 25qrs 1bu of oats were threshed by casual threshers.¹³⁷ At Ormesby St Margaret in 1436/7, 95qrs 2bu wheat were threshed at the price of 5d per quarter, 283qrs 5bu of barley threshed at 2½d per quarter and 158qrs 6bu of oats at 2½d; in the following year, 72qrs 1bu of wheat, 224qrs of barley, and 26qrs of oats on top of 33.5qrs of peas were threshed by casual threshers.¹³⁸ The first implication of the above cases is that, indeed, over time when the wage rate increased and the demand for casual labour remained steady, the cost of labour increased. The other implication, however, is that the demand was hardly steady. The three cases have allowed a glimpse at the fluctuating demand for threshing labour. A fuller impression is illustrated in Table 2.5 using the data from the Elvethall accounts. The table shows significant fluctuations in the amount of grain threshed by casual labour. It shows that the demand for casual labour fluctuated frequently, such as in one year only 46qrs of grain altogether were threshed by casual labour and that in the other year 49.12qrs of wheat were threshed by it. The fluctuation is also visible in the cost of threshing

¹³⁶ DCDM, EAR 1448/9.

¹³⁷ HRO, 11M59/B1/177-178.

¹³⁸ TNA, SC 6/939/11, 12.

labour, which is as low as 10.08s and as high as 171.42s, demonstrating that employment of casual labour was not a rigid practice on the demesne.

| Table 2.5 The use of casual labour in threshing on the Elvethall demesne, Durham. | | | | | |
|---|--------|--------|--------|--------|--------|
| | 1450/1 | 1461/2 | 1470/1 | 1480/1 | 1490/1 |
| The amount of work done by casual labour (quarters) | | | | | |
| Wheat | 4 | 28 | 8.25 | 49.12 | 44 |
| Barley | 42 | 81 | 152 | 140 | 103 |
| Rye | 0 | 10 | 7.5 | 18 | 0 |
| Oats | 0 | 56 | 0 | 50 | 12 |
| The cost of threshing labour (s) | | | | | |
| | 10.08 | 116.67 | 111.83 | 171.42 | 106 |
| Source: DCDM, EAR 1450/1, 1461/2, 1470/1, 1480/1, 1490/1 | | | | | |

Likewise, the demand for harvest labour is recorded in the cost of harvest labour. The problem is that the harvest records are not as consistent as the threshing records. In table 2.2, Items 31 and 32 show only that 115s 8d was spent on wages and meals, in addition to the perks given to the *famuli*, but no detail of the demand is given. Table 2.4, however, provides useful information, like 104 man-days of casual labour being used to harvest 106¾ acres. By comparing the data with the other years' data, it is clear the demand for casual labour fluctuated like in threshing, but the data are much discontinued and unable to form meaningful series.¹³⁹ Useful data are found on a smaller number of demesnes, counted by man-day like at Pittington in 1413/4, where

¹³⁹ For example, in the summer of 1437 only 80 man-days of casual labour were used and 134.5 man-days were used in the summer of 1444. TNA, SC 6/939/11, -940/5.

374 man-days were employed to reap and bind crops; or by acre like at Ebbesbourne in 1420/1, 123 acres were harvested by casual labour.¹⁴⁰ Table 2.6 is composed to show the fluctuation in demand for harvest labour on these two demesnes. More series can be composed using the data from other demesnes to demonstrate that the demand for casual labour in the harvest was fluctuating by year. The fluctuating demand in this and the above case must be taken into consideration in the discussion of the labour market.

| Table 2.6 The use of casual labour in the harvest at Pittington and Ebbesbourne | | | | | | |
|--|-----------|---------|--------|---------|--------|--------|
| Pittington | | | | | | |
| | 1399/1400 | 1409/10 | 1420/1 | 1429/30 | | |
| Casual labour (man-days) | 414 | 334 | 243 | 277 | | |
| Ebbesbourne | | | | | | |
| | 1400/1 | 1410/1 | 1420/1 | 1430/1 | 1440/1 | 1451/2 |
| Casual labour (acres) | 131 | 93 | 123 | 129 | 139 | 140 |
| Source: DCDM, PAR 1399/1400, 1409/10, 1420/1, 1429/30; HRO, 11M59/B1/150, 157, 166, 174, 181, 188. | | | | | | |

The Elvethall account illustrates that probably only a part of farming work was finished by casual labour. In Table 2.2, receipt of threshed grain is recorded in Items 40, 55, 62, and 69 specifying that there were 43qrs 3bu of wheat, 41qrs of rye, 160qrs 4bu of barley, and 55qrs 4bu of oats threshed. Of this much grain, as indicated in

¹⁴⁰ DCDM, PAR 1413/4.

Items 24 and 25, only 8qrs of wheat and 98qrs of barley were done by casual labour. Apparently the rest was worked by other types of labourer. In 1433/4 at Elvethall, only 4s 8d was spent on threshing. The record explains ‘paid for threshing this year 4s 8d and no more because the rest was threshed by the *famuli*’. The statement allows no speculation because on the back of the roll it specifies the amount of grain threshed by the *famuli*, who evidentially did almost all threshing that year.¹⁴¹ At Pittington, in 1423/4, whilst Thomas Yutt was hired to thresh for 12 days, the rest was done by the *famuli* (*et residuum triturationum per famulos*), recorded in the same manner as above.¹⁴² Similar is found at Alciston, where the *famuli* threshed 15qrs of wheat, 21qrs 2bu of barley, 24qrs 1bu of oats and 60qrs 2¾bu of legumes in 1435/6.¹⁴³ On the Merdon demesne an extreme case illustrates that in threshing ‘no pay because it was done by labour services’.¹⁴⁴ Similar patterns are found elsewhere, though the proportion done by casual labour varied.

The difference between the use of casual labour and the amount of total demand is also observed in the harvest, but the data are not as easy to interpret as the data of threshing. Thus, the consistency of data must be addressed first. The harvest acreage,

¹⁴¹ The record specifies ‘*Et de xxv q^ar j bu iij p^c (frumenti) provenientibus de exitu grangij huius anni unde tot triturationis per famulos curie ... Et de xiiij q^ar j bu j p^c (siliginis) provenientibus de exitu grangij huius anni unde tot triturationis per famulos curie ... Set respondet de iij^{xx} xvij q^art receptis de exitu grangij hoc anno unde xxv q^ar triturationis ad tascham et residuum per famulos curie ... Set respondet iij^{xx} q^ar provenientibus de exitu grangij hoc anno triturationis per famulos curie*’; DCDM, EAR 1433/4.

¹⁴² The rest of the grain produce consisted of 86qrs 5bu of barley, 179qrs 2.5bu of oats, 3qrs of peas and an unreadable amount of wheat; DCDM, PAR 1423/4.

¹⁴³ ESRO, SAS/G44/88.

¹⁴⁴ HRO, 11M59/B1/150-191. It may be worth noting that the accountant of the manorial demesne at Werrington did not record the threshing cost either, because the task was handed over to the granary; DRO, D52/1 Werrington Granary 1411-1475.

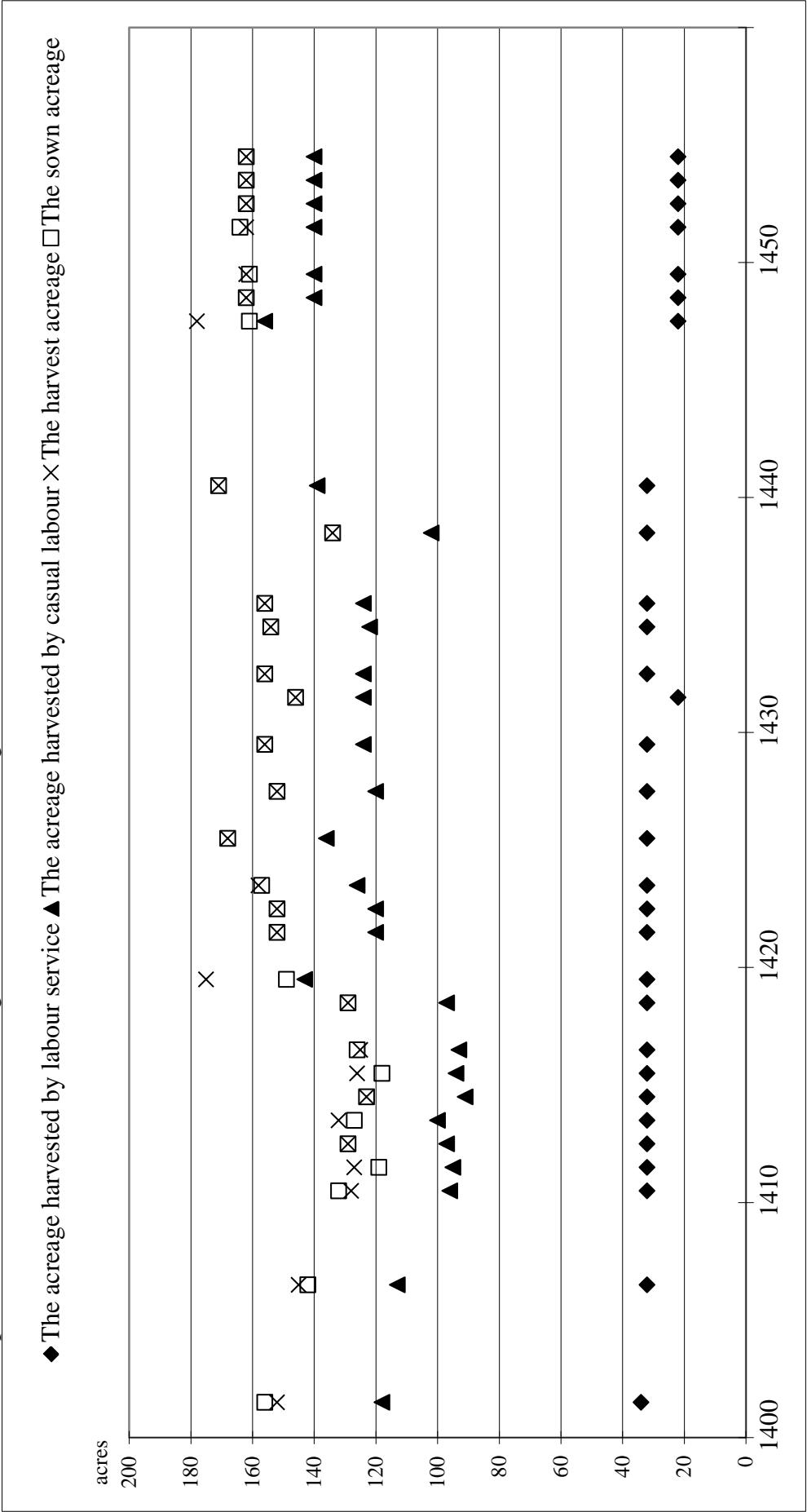
which stands for the demand for labour, is assumed to be close to the sown acreage.

This analogy is not necessarily accurate, because of the possibility that a part of the crops was left ungathered and did not demand labour. This possibility had happened in the wake of the Black Death, but there was no known report from our period.¹⁴⁵ It might happen when the price of grain was so low that hiring many casual labourers was not economic. This theory accounts for temporary adjustments in reaction to the changes in the grain market rather than a structural factor residing in management.

The manager, firstly, while foreseeing an unfavourable grain market, might reduce the sown acreage for the coming years to avoid wasting seed. In the meanwhile, he still had permanent labourers and possibly labour services to be exploited without creating much financial burden, even though the price level of grain was low. Above these uncertainties, evidence, when available, supports the analogy. On the Ebbesbourne demesne the harvest acreages undertaken by various types of labourer are available for the calculation of the total harvest acreage. Chart 2.1 is composed to illustrate that the sown acreage and the harvest acreage are indeed close to each other. This pattern is observable on other manorial demesnes where harvest acreages are available, like the Winchester and the Glastonbury demesnes, demonstrating that oddities are found but only occasionally and that the sown acreage is an acceptable indicator of the harvest acreage in general for an analysis of the composition of the workforce, whilst

¹⁴⁵ R. B. Dobson (ed.), *The Peasants' Revolt of 1381* (London, 1983), p. 61.

Chart 2.1 A comparison between the sown acreage and the harvest acreage on the Ebbesbourne demesne, Wiltshire



Source: HRO, 11M59/B1/150-191.

there is no intention to equate the sown acreage with the harvest one in a strict sense in this thesis.

Basing on this analogy, it is possible to compare the total demand for labour with the demand satisfied by casual labour. In Items 42, 57, 64, and 71 in Table 2.2, it is indicated that 9qrs 4bu of wheat, 4qrs 4bu of rye, 14.5qrs of barley, 19.5qrs of oats were made seed. According to the sowing rates on the nearby Pittington demesne, the sown acreage at Elvethall was around 140 acres before 1466 and 200 acres after.¹⁴⁶ In comparison with the consistent sown acreages, the fluctuating cost of labour, since no harvest acreage is available in this account, is interesting. In 1425, 192s 8d was paid in the harvest, 92s 4d in 1434, 115s 8d in 1448, 95s in 1456; as for after 1466, 78s 1d was paid in 1467, 124s 8d in 1480, 109s 4½d in 1490.¹⁴⁷ The probable explanation is a fluctuating amount of casual labour was hired to work with the *famuli* whose labour input was fluctuating, too. According to Table 2.6, apparently the same pattern was used on Pittington. On the Winchester demesnes, where labour service was used, clear records are preserved to indicate the labour input of labour services. As a result, the composition of the harvest workforce on these demesnes is clarified, as exemplified in

¹⁴⁶ DCDM, PAR 1405/6, 1407/8. Rye was sown at the same sowing rate; see Lamond, *Husbandry*, p. 67. Lomas has suggested that the increase in the grain produce on the Elvethall demesne was a result of the increased sowing rate in 1466. My calculation demonstrates two consistent levels of the sown acreage before, *i.e.* 140 acres, and after 1466, *i.e.* 200 acres. They could not be pure coincidences. Moreover, because the sowing rate in Durham remained almost unchanged from the fifteenth century, *e.g.* the Pittington data, to the early nineteenth century, it is unlikely that there was a major change in sowing rate. See R. A. Lomas, 'A northern farm at the end of the middle ages: Elvethall manor, Durham, 1443/4-1513/14', *Northern history*, 18 (1982), pp. 26-53; for the early nineteenth-century sowing rates, see J. Bailey, *General view of the agriculture of the County of Durham* (London, 1810), pp. 113, 115, 124, 126, 130-133, 135-137.

¹⁴⁷ DCDM, EAR 1424/5, 1434/5, 1447/8, 1455/6, 1466/7, 1479/80, 1489/90.

Chart 2.1. Table 2.4 suggests that at Ormesby St Margaret casual labourers worked for 104 man-days; contracted workers took on 7×6 man-days; and five ploughmen and two threshers took on another 7×6 man-days during the harvest. The distribution of work is about 17% by casual labourers; 41.5% by contracted labourers; 41.5% by the *famuli*. More variations can be found by diligent search. These cases convey exactly the same message as in the discussion of threshing labour – casual labourers were only one of two or three types of labourer working in the seasonal operation. The source material provides quality data to illustrate the distribution of labour between these types of labourer, demonstrating the varying composition of the workforce.

The *famuli* were one of the two types of labourer that might have worked on the demesne working with casual labourers. Their activities in seasonal operations have been illustrated above. Even when their activities are not recorded, it is still possible to perceive their contribution to an operation because the *famuli* were the permanent workforce on the demesne. Most *famuli* were hired by annual contract mainly to take on continuous responsibilities.¹⁴⁸ They were the other type of paid labourers; and in contrast to the casual wage rate that stands for the price of finishing a piece of work, their salary is a potential proxy for examining the income of the agricultural labourer. It has been suggested that there are uncertainties in the terms of employing the *famuli*, such as serving in exchange for tenancy and possession of holding, and uncertainties

¹⁴⁸ Postan, *The famulus*, pp. 16-17, 31; Farmer, 'The *famuli*', pp. 211-214.

in the composition of their salary, such as Saturday ploughing and quittance of rent.¹⁴⁹

The source material of the fifteenth century illustrates that both issues were much simplified. Items 33, 34, 43, 44, 46 and 58 in Table 2.2 exemplify the typical pattern.

There was one reeve, one carter, and five untitled *famuli* who were likely ploughmen, all hired for the year. They were likely freemen taking on contracts in line with the ordinary pattern used in this century. Regarding remuneration, there were four types of payment, but all based on two elements: cash and grain. In this year, the five *famuli* were paid 16s each; they also received 1bu mixture of wheat and rye every 3 weeks for 50 weeks for the year. At Alciston and Lullington, the type was slightly different.

The *famuli* received the yearly cash stipend like at Elvethall, but the issue of grain was divided into two sessions: from Hockday to Michaelmas (24 weeks) *vadia* of 7d per week were issued in place of grain delivery; from Michaelmas to Hockday (28 weeks) normal grain delivery, *i.e.* 1bu of barley per week, was given.¹⁵⁰ *Vadia* and the grain delivery were issued in place of board. At Ormesby St Margaret, for several years the *famuli* boarded on the demesne rather than receiving grain delivery.¹⁵¹

Lastly, on the demesnes at Hurdwick and Werrington, the *famuli* were paid totally by cash. This might be taken as another simplification of the combination of cash and grain. Therefore, on the one hand, the simple terms of employment allow us to

¹⁴⁹ J. Hatcher, 'England in the aftermath of the Black Death', *Past & Present*, 144 (1994), p. 29; Farmer, 'The *famuli*', p. 229; Postan, *The famulus*, pp. 37, 43-46.

¹⁵⁰ E. Searle, *Lordship and community: Battle Abbey and its banlieu, 1066-1538* (Toronto, 1974), p. 35.

¹⁵¹ TNA, SC 6/939/11.

reconstruct the pattern of hiring permanent farm labourers; on the other, because the composition of the remuneration is simple, construction of a wage index of the *famuli* looks promising.

Customary labourers were another type of labourers working on the demesne. The Elvethall record concurs with the opinion that the employment of labour services was relinquishing especially after the Black Death and that in the fifteenth century, it was mostly gone. Only, apparently, a little boon ploughing received from the adjacent village of Shincliffe was conducted after *c.* 1453.¹⁵² At Ormesby St Margaret, of 145 services of the harvest boom, only 3½ were performed in 1424.¹⁵³ However, on many other demesnes labour service was still broadly used. The record is kept in two places. On the estate of the bishops of Winchester it is found in the records of seasonal operation. For example, in 1447/8, on Ebbesbourne, as illustrated in Chart 2.1, two harvest boons were used to reap, bind and bring in 22 acres of grain. A total of 4s 8d was paid for their refreshments in the pattern used on other Winchester estates.¹⁵⁴ At Merdon, the threshing task was ‘not paid because it was done by services’; the harvest of 253 acres was done by them; and in ploughing, 30 customary tenants ploughed 120 acres in 1409/10.¹⁵⁵ On some other demesnes a specific account of labour service was kept. In the end of the Werrington account roll, a section indicates the service of

¹⁵² DCDM, EAR 1453/4.

¹⁵³ TNA, SC 6/939/1.

¹⁵⁴ HRO, 11M59/B1/185.

¹⁵⁵ Page, *The pipe roll*, pp. 374-377; HRO, 11M59/B1/150-191.

ploughing, harrowing, mowing, carriage with carts, carriage with horses and reaping oats. Each item contains the number of exempted, released, performed, and sold labour services. The same record is found on the four Norwich Priory demesnes and elsewhere.¹⁵⁶ Like the consistent data of labour services revealed in Chart 2.1, the latter type of record provides high quality data suitable for quantitative illustration of comparative importance of customary labour.

These raw data, although in need of processing, have already conveyed clear messages. A critical apparatus of the labour market portrayed by the account has not been treated seriously in the study of wage labour – the formation of the demand side. Frankly, when the wage rate is used to represent the balance between supply and demand for labour, both the supply side and the demand side have to be properly considered. Yet so far only the supply side, which is understood to be in accordance with population, has been explored. The above discussion has illustrated the raw data that account for the composition of the workforce, the amount of demand for labour, and a potential proxy for studying the labourer's income, available from the same source material as the wage data. They constitute a more substantial part of the account, supplementing the wage evidence in the understanding of the finance on the demesne and elaborating many details of the workforce beyond the capacity of the

¹⁵⁶ M. Bailey, *The English manor c. 1200 – c. 1500: selected sources translated and annotated by Mark Bailey* (Manchester, 2002), pp. 158-161.

existing wage statistics. They are the elements for a preliminary attempt to reconstruct the demand side of the labour market in fifteenth-century English agriculture.

2.3 The demand-side of the agricultural labour market

Given that the wage rate represents balance between supply and demand, the problem of the traditional model is its concentration on the supply side and omission of the demand side. This omission is most unfortunate, because manorial accounts are documents produced by the employers, that is, a source material of the demand side.

The importance of the demand side can easily be recognised when one intends to estimate the income of a casual labourer in a certain operation, in the year, or from one year to the other. The wage rate is the price of finishing a unit of work, e.g. threshing a quarter of grain or reaping for one day, but it does not give indications of how many units of work were available. Thus it gives no indication of how much a labourer earned, how much hired labour was employed, how much paid labour burdened the manorial demesne, or how they changed during the year and from one year to the other. It has been illustrated in the above discussion that information of the amount of work done by a single labourer, albeit existing, is less common to find, whilst the amount worked by the whole group of labourers is available. The latter should be a fine source material for researching this subject, as it allows us to take

advantage of a more substantial evidential basis. The changes in demand for casual labour may be understood from three dimensions. First, casual labourers constituted only a part of the agricultural workforce. The composition of the workforce, which was determined by local practice, effectiveness of the lordship, quality of soil, or other socio-economic factors, is itself a determinant of demand for casual labour. Secondly, the demand and the composition of the workforce changed during the year. The farming cycle generated different workload and changed the composition of the workforce in various farming seasons. Therefore, the second dimension shall present the distribution of demand for casual labour during the year. Thirdly, as illustrated, the demands for casual labour in individual operations fluctuated from one year to the next. The fluctuation might be a result of changing yields, sown acreages, availability of the other types of labourer, or accidental events like an outbreak of pestilence. This third dimension accounts for the yearly change in the demand, which should be considered equally with the change in supply to form a complete model of the labour market. The following discussion is intended to construct the evidential bases for studying the three dimensions.

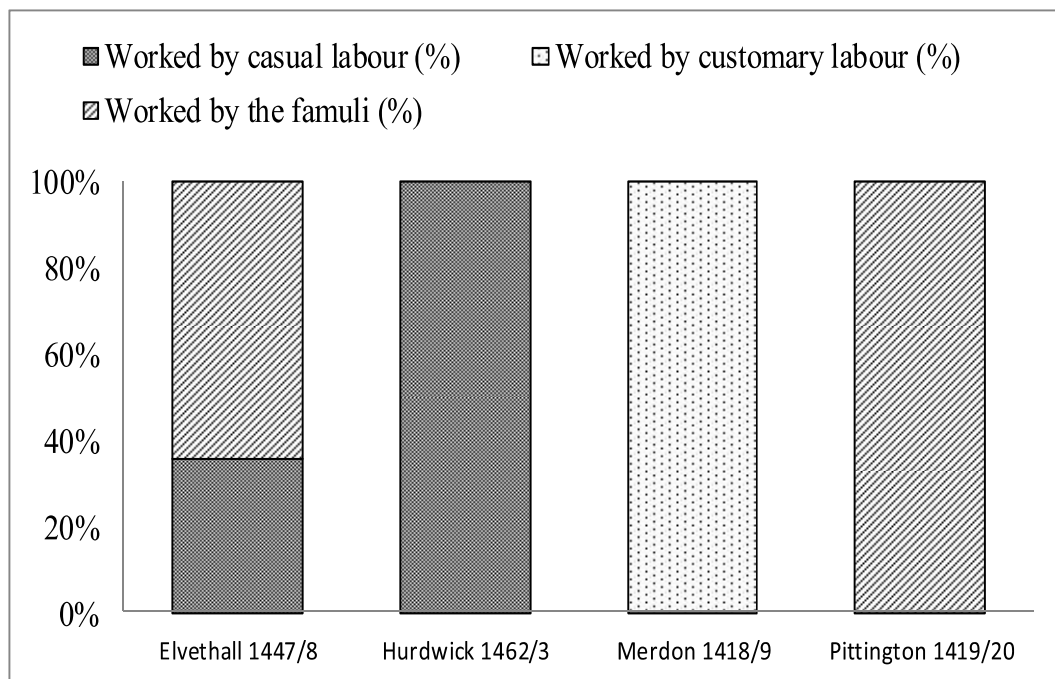
The first dimension stands for the composition of the workforce in an operation on a demesne at a given moment to provide a basic understanding of the comparative importance of every type of labourer. As stated, casual labourers represented only part

of the workforce, and their role varied from one manor to the next. The Elvethall case suggests that casual labourers worked closely with the *famuli* in threshing and probably in the harvest. Items 28 and 29 in Table 2.2 imply that weeding and mowing were completely worked by casual labourers. The Ormesby St Margaret case in Table 2.4 indicates that the *famuli* worked in the harvest together with casual harvesters. Chart 2.1 provides evidence for the involvement of customary labourers in the harvest at Ebbesbourne. At Longbridge Deverill, all 92 acres of sown fields were reaped in 1452/3, in which casual labourers harvested 73 acres, customary labourers 14 acres, and the *famuli* worked 5 acres on top of their duty of carriage. At Merdon grains were threshed by customary labourers; and at Alciston crops were harvested by the *famuli*. Chart 2.2 is produced to present the patterns recognised in the source material. It elaborates the considerable variety in employing the three essential types of labourer.

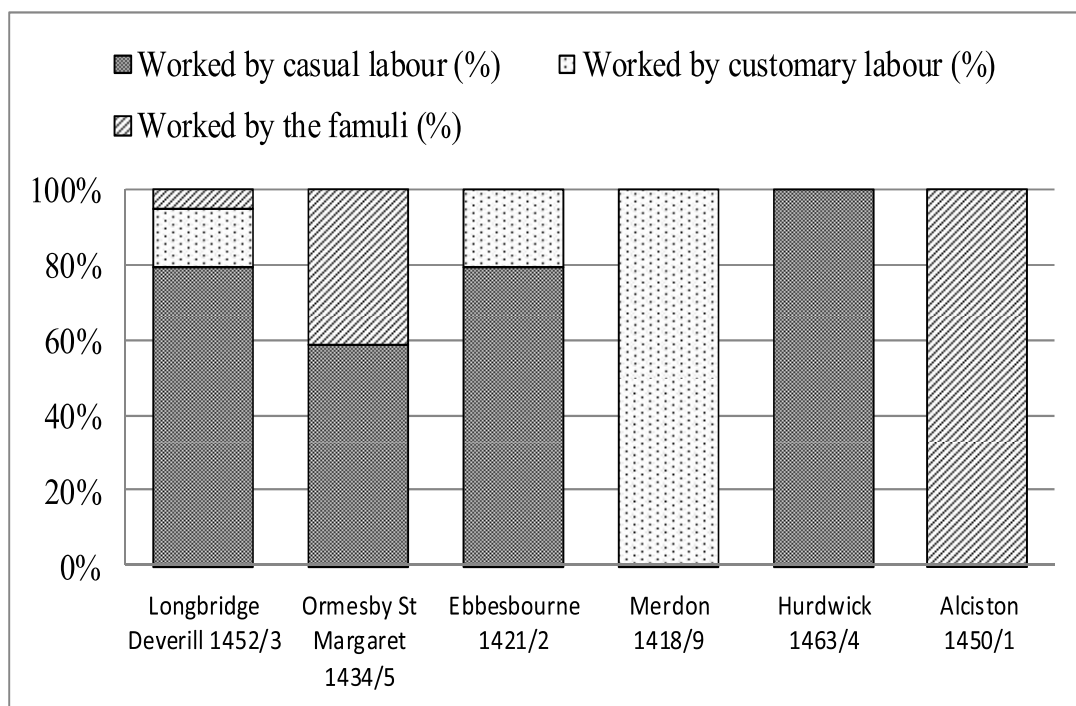
Chart 2.2 illustrates considerable variety in the composition of the workforce. The variety is regional as well as institutional. On the two demesnes belonging to Durham Priory, the *famuli* were involved in threshing and potentially in reaping. On the four demesnes belonging to Norwich Priory (Flegg, Taverham, Martham, and Plumstead) in northeast Norfolk like on the Cleres' demesne at Ormesby St Margaret, the *famuli* took part in the harvest on a regular basis. The Priory employed its

Chart 2.2 Patterns of composition of the workforce in threshing and in the harvest

In threshing:



In the harvest:



Sources: DCDM, EAR 144/8, PAR 1419/20; DRO, D52/1 Hurdwick 1462/3, 1463/4; HRO, 11M59/B1/164, 167; SHC, TPH\lon/2/6/9838; TNA, SC 6/939/10; ESRO, SAS/G44/103.

customary labourers to work with the *famuli*, whilst the Cleres relied on casual labourers. Battle Abbey's demesne at Lullington used the *famuli* to harvest the whole field like at Alciston. On its estate at Apuldram, which is on the north-eastern upper reach of Chichester Harbour, the extensive use of the *famuli* was applied, but casual labourers were also hired to harvest a part, *i.e.* about 65 acres, of the field.¹⁵⁷ On its Wiltshire demesne at Bromham, a composite workforce of the *famuli* and casual labourers was used.¹⁵⁸ In Wiltshire, the Winchester demesnes at Ebbesbourne and Downton, as well as other Winchester demesnes in Hampshire and in the Midlands, did not employ the *famuli* in threshing and only used them to do carriage in the harvest; and they used labour services to work with casual labourers. The activities of the *famuli* in seasonal operations were insignificant on the estates of Glastonbury Abbey and Tavistock Abbey in the south-west. On the Midland manorial demesnes, *e.g.* Woolstone, Acton, Broadway, and Hewell, the managers embraced the Winchester pattern. These cases demonstrate extensive uses of the other two types of labourer. They urge us to reconsider the importance of casual labour in the discourse of wage labour.

As for the second dimension, the structure of the manorial account provides a convenient starting point for the examination of seasonal employment. There were

¹⁵⁷ TNA, SC 6/1017/17-1019/20.

¹⁵⁸ TNA, SC 6/1046/12-1047/20.

three major seasonal operations – mowing and weeding, threshing and winnowing, and the harvest – usually recorded independently in the manorial accounts. It demands efforts to find out accurate timing of the operations, as will be demonstrated in Chapter 3, but the records alone allow us to have a glimpse at the varying demand during the year, especially in the operations of threshing and harvest, for which evidence is abundant. The labour inputs in the two operations are counted by different units. By converting the labour inputs into man-days, like E. Karakacili has done, it is possible to compare the two operations.¹⁵⁹

It is known that demand for labour varied across the year. A comparison between threshing and the harvest should prove this common point in the medieval context. Clark has estimated that in the first half of the fifteenth century in one day the labourer could thresh 7.3bu of wheat on average. He has also suggested that ‘in the time taken to thresh a bushel of wheat, roughly 1.75 bushels of barley could be threshed and 2.25 bushels of oats’.¹⁶⁰ As for the harvest, the *Anonymous Husbandry* suggests ‘five men can well reap and bind two acres a day of each kind of corn, more or less’.¹⁶¹ Accordingly, about 220 man-days were employed in threshing on the Elvethall demesne in 1447/8, of which around 70 man-days were undertaken by

¹⁵⁹ E. Karakacili, ‘English agrarian labor productivity rates before the Black Death: a case study’, *Journal of Economic History*, 64 (2004), pp. 49-50.

¹⁶⁰ G. Clark, ‘Productivity growth without technical change in European agriculture before 1850’, *The Journal of Economic History*, 47 (1987), p. 426; idem, ‘The long march of history’, p. 112.

¹⁶¹ Lamond, *Husbandry*, p. 69.

casual threshers; and about 334 man-days were used to reap probably the whole field.¹⁶² At Pittington the ratio between casual labour input and total labour input was about 100/166 man-days in threshing; in the harvest it was 322/454 in 1412/3. These cases demonstrate that availability of casual opportunities varied roughly following the farming cycle. Supposedly the harvest was the only occasion when the village labour supply was totally employed in work, in the rest of the year the supply was underemployed.

This comparison leads to two problems, relative to the labourer's income and the demesne's finance, that deserve further examination. These operations, including weeding and mowing, were the major opportunities for villagers to find casual employment in agriculture. There were other opportunities, like Items 20 and 22 in Table 2.2, but they required special skills. Or the demesne might hire casual labourers to shear sheep, to ditch, to do maintenance, and so on, but some of them paid a little and some of them were not conducted on a regular basis.¹⁶³ In addition, the cost of labour in the major operations varied. Table 2.2 illustrates that in that year 27*s* was paid to the labourers working in threshing and winnowing, in weeding and mowing it was 4*s* 11*d*, in the harvest it was about 115*s* as shown in Items 27, 30, and 32. That is,

¹⁶² Calculation of the labour input in the harvest on the Elvethall demesne is difficult because the account only provides the amount of seed, but not the sown acreage. The calculation used the seeding rate from the Pittington demesne, which was three miles away, and got a result of 133.67 acres. To reap that much about 334 man-days were required. As for the employment of casual labourers, the account does not provide the wage rate, but only the total amount of the cost. The cost, 115*s* 8*d*, is sufficient to hire 347 man-days. Therefore, it should be reasonable to assume that the whole field was reaped by casual labourers.

¹⁶³ For example, ESRO, SAS/G44/106; DRO, D52/1 Werrington 1451/2, 1470/1, 1498/9.

many villagers who were able to find employment in the harvest could not find jobs in threshing; and those who worked in threshing were not necessarily able to find hire in mowing and weeding. Since those operations happened in certain periods in the year, the casual labourers were not consistently employed in agriculture and the wages they received are a questionable proxy for understanding their yearly income.

The considerable cost of labour in the harvest was an opportunity for labourers and also a burden on the demesne. Nevertheless, the source material illustrates that many demesne managers tended to use other types of labourer in this operation. At Ebbesbourne a few harvest boons were kept till the end as illustrated in Chart 2.1; and on the Ormesby St Margaret demesne, in the summer of 1435, the *famuli* accounted for 38.6% of the harvest work in Table 2.4. At Alciston and at Lullington the *famuli* were normally the only labour force employed in the harvest. At Ecchinswell, customary labourers reaped the whole field before 1446; after it they were still responsible for 32 acres.¹⁶⁴ In 1407, on the Flegg manorial demesne, 132½ labour services worked together with seven *famuli*, when no casual harvester was hired.¹⁶⁵ In contrast, threshing was mostly a duty for casual labourers. Normally, the *famuli*, if taking part in this operation, took on a small proportion of it, except at Pittington. Similarly, the role of labour services appears to have been insignificant in threshing.

¹⁶⁴ HRO, 11M59/B1/150-191.

¹⁶⁵ NRO, DN/EST 9/12.

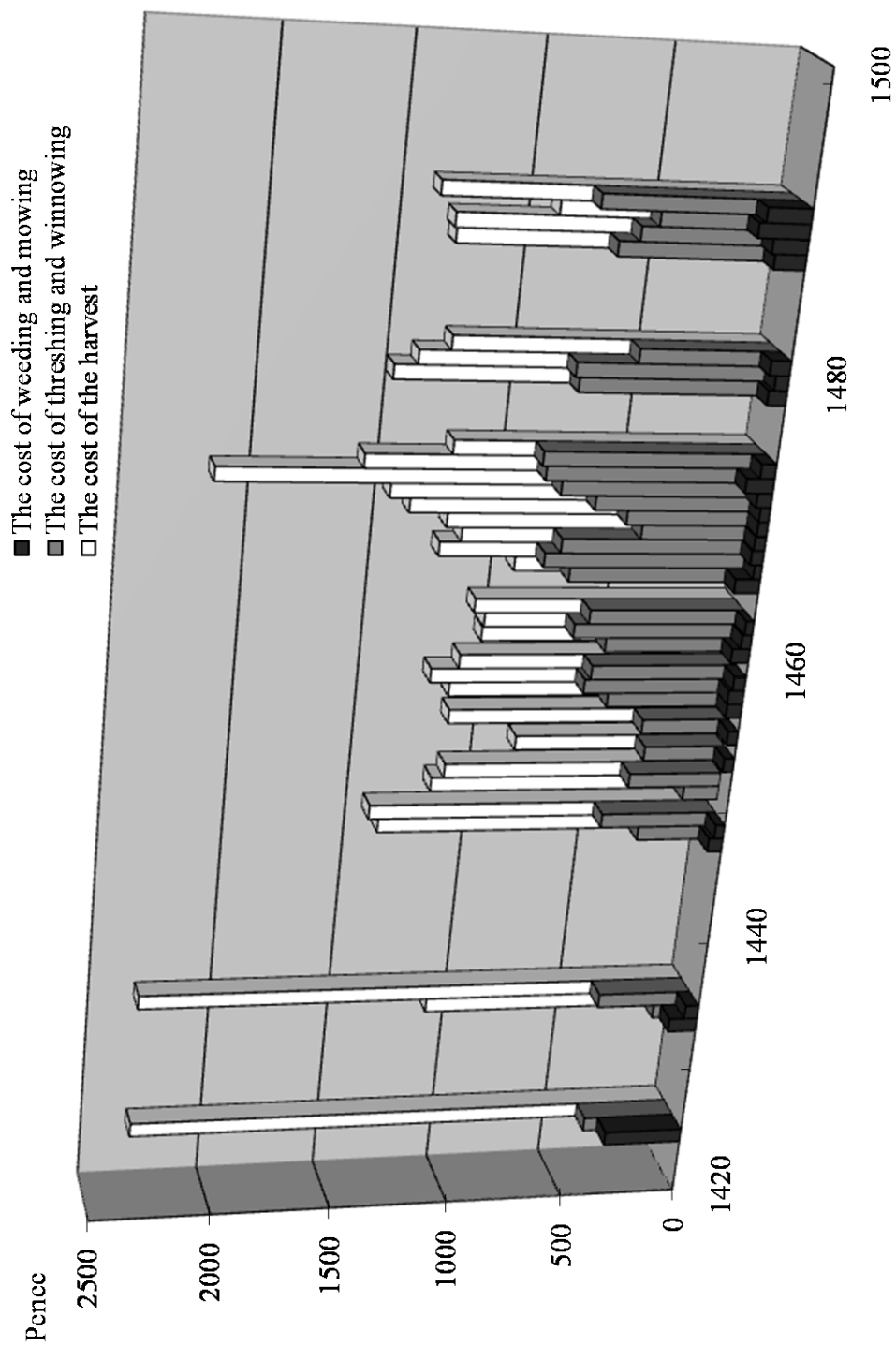
In many cases they threshed a small portion of grain, except on the Merdon manorial demesne where customary labourers threshed all grain produce.¹⁶⁶ The implication is that since in the harvest season labour was the most expensive and the demand was the strongest, the demesne manager had every reason to reduce the cost. It is possible that on the large farm, especially the seigniorial demesne, the employer could more efficiently manage the harvest labour forces than on a peasant holding where hired labourers were mostly casual labourers. This managerial tactic, at any rate, should not change the fact that the harvest had the highest demand for labour.

Chart 2.3 illustrates that the demand, in all three operations, fluctuated from one year to the next. This is the third dimension of the model. Frankly, because the harvest workload was much determined by the sown acreage and the threshing one decided by yields, even on the smallest arable holding the yearly labour input in the operations fluctuated. As for mowing and weeding, there is too little information for us to perceive its arrangements, but it should not be much different. This pattern suggests that the demand was elastic. As long as the labour supply could satisfy a particularly high demand in one year, in the other years some villagers were not able to be fully employed in that operation whilst the wage rate remained unchanged.¹⁶⁷ In

¹⁶⁶ HRO, 11M59/B1/150-191.

¹⁶⁷ The data used in Chart 2.4 were, apparently, calculated of medieval source material, which is notoriously fragmented. The fluctuations in it are likely a result of discontinuities in the raw data. In the original document, changes in wage rates mostly happened in the latter half of the fourteenth century. During the fifteenth century, the wage rate remained mostly unchanged in the same operation. A detailed discussion of this matter is given in Chapter 6.

Chart 2.3 The cost of labour in the three seasonal operations on the Elvethall manorial demesne, Durham, 1420-1500

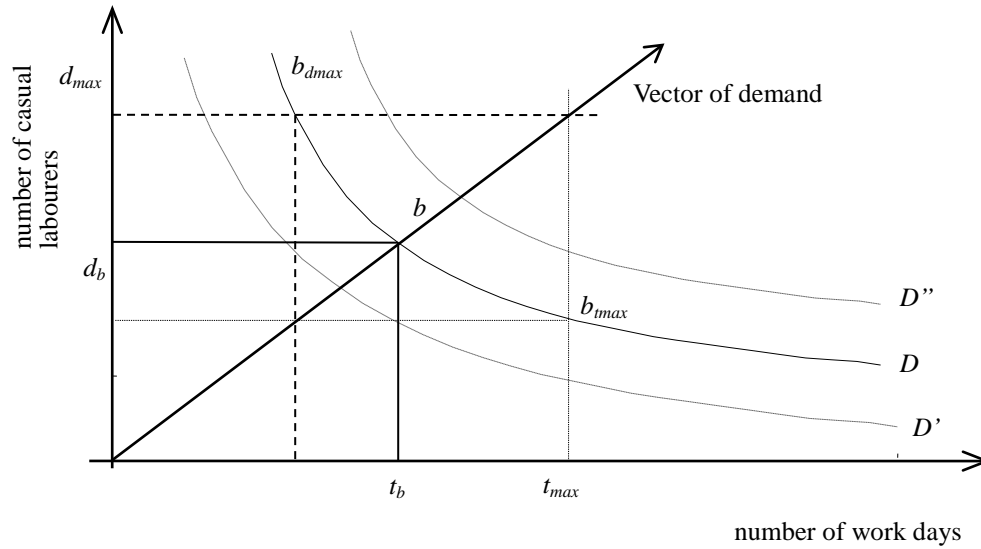


Source: DCDM, EAR 1424/5-1491/2

another word, the village labour pool had the capacity to cope with the fluctuating demand and the wage rate would not change unless the fluctuation went way off the capacity of the village labour pool. As the trend in money wage rates is concerned, this phenomenon indicates that it had a sluggish response to the shifts in the supply and demand for labour.

Chart 2.4 is produced to explain this phenomenon. In the chart, vector d stands for the number of labourers required to finish the work within a given time represented by vector t . Variable d_{max} is the maximum number of labourers available for the demesne; and t_{max} is the time limit for finishing the work; b indicates the situation on the curve of demand D . In a normal year, the demesne could safely operate without fully employing the available supply of labour and could finish the operation before reaching t_{max} . Thus, it did not have to change the wage. When the demand reduced to D' , the situation became easier for the demesne that was allowed to speed up the operation without increasing hired labour. When the demand increased to D'' , the margin of manipulation reduced but it was still possible to avoid labour shortage by lengthening the work period, though it was now more vulnerable to bad weathers and so on. Only when the supply became too low, the time for the operation was too short, or the demand for labour was too high, a shortage of labour would be generated and the wage rate rose.

Chart 2.4 The demand curve of employment of casual labour

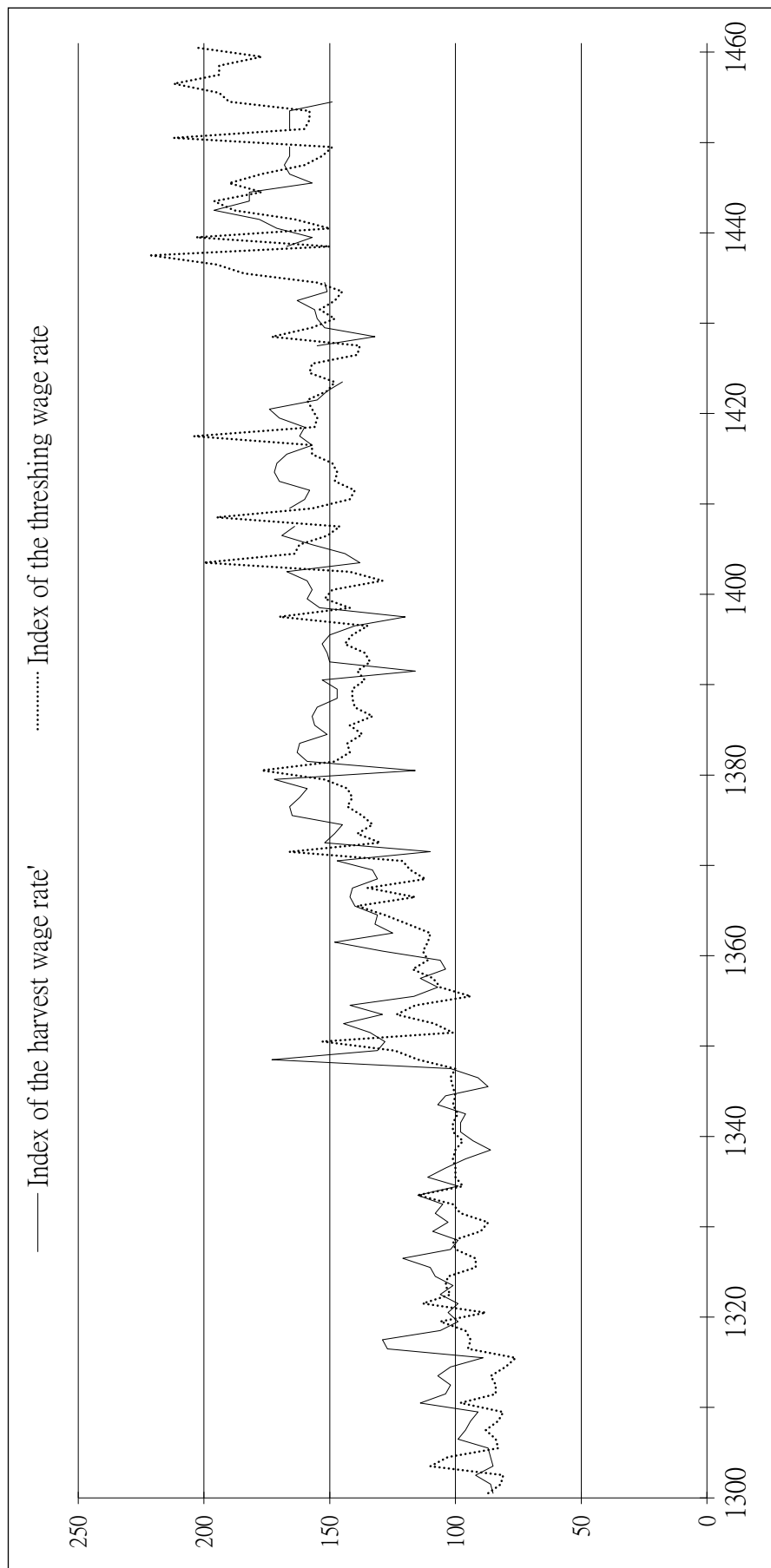


Notation

| | |
|------------|---|
| b | The present situation. |
| b_{dmax} | The situation when the maximum number of casual labourers was hired |
| b_{tmax} | The situation when the maximum time limit was used |
| D | The present demand for casual labour |
| d_{max} | The upper limit of the number of casual labourers could be found to work on the demesne |
| d_b | The present number of casual labourers working on the demesne |
| t_{max} | The limit of the work period |
| t_b | The period undertaken by casual labourers at the present situation |

Chart 2.4 has a further implication in relation to seasonal variations in demand. Let's assume that D'' is the demand curve in the harvest, which stands for the market of the busy seasons, and D' is the curve in the threshing, which represents the market of the slack seasons. When the same number of workers was provided, the threshing could be finished faster than the harvest; and when the same work period was given, the threshing operation required fewer workers. In addition, the harvest happened within a short period in August with September for the post-autumn work, whilst the threshing was allowed a period from the autumn to the late spring. When a shortage of labour appeared, the harvest labour market would be hit directly, whilst the threshing one was less affected because it demanded a smaller labour force and was allowed a longer period to finish the work. Thus, the model suggests that the seasonal variations had a special role in wage determination. In the slack seasons the wage rate should have a relatively sluggish response to labour shortage than in the busy seasons. This, however, should not have any influence on the secular trend in wage rates. When labour was short of supply, the wage rate in the busy seasons would likely increase promptly and job opportunities there would relatively expand. This change, as R. C. Allen and Dyer have recognised, might reduce the labourer's desire to take on more tedious farming tasks, especially in the tasks for which he was relatively poorly paid,

Chart 2.5 The movements in the wage rates in the harvest and in the threshing, 1300-1450.



Source: Farmer, 'Wages and prices, 1042-1350', pp. 815-817; idem, 'Wages and prices, 1350-1500', pp. 516-518.

because his needs for income were already satisfied.¹⁶⁸ Hence a relative shortage of labour was created in the slack seasons and increased the wage rate. This possibility is demonstrated in Chart 2.5 where the rising money wage rate of threshing lags behind the rising wage of harvest, whilst they both move in the same direction.

Overall, the above model provides a possible answer to the historians' doubt of the reliability of wage series in indicating changes over the short period.¹⁶⁹ Over the short period, casual money wage rates had a tendency to be sluggish to economic changes, because fluctuations in the demand for labour from one year to the next was normal. When an economic event happened, it created yet another fluctuation familiar to villagers, unless it was as strong as the ones in the latter fourteenth century.

The tendency to be sluggish, however, does not account for the secular trends in wages over a long period. It is known from the supply side that the Black Death and following outbreaks of plague created a prolonged period of labour shortage, which increased the wage rate permanently. Similar factors are hard to establish from the demand side. It has been said that in the late middle ages, marginal lands were given up and villages were deserted, implying a shrinking demand for labour; but there is no way to tell to what extent the labour market was influenced.¹⁷⁰ It has been illustrated

¹⁶⁸ Dyer, *Standards of living*, pp. 224-225; R. C. Allen and J. L. Weisdorf, 'Was there an 'industrious revolution' before the industrial revolution? An empirical exercise for England, c. 1300-1830', *Economic History Review*, 2nd ser., 64 (2011), pp. 717-722.

¹⁶⁹ Bridbury, 'The Black Death', pp. 577-578; Harvey, 'Introduction', p. 6; J. Hatcher, 'Aftermath', pp. 3-35.

¹⁷⁰ C. Dyer, 'Deserted medieval villages in the West Midlands', *Economic History Review*, 2nd ser., 35 (1982), pp. 20, 22-29.

that many landlords converted arable lands to pastures, which reduced the demand for agricultural labourers; or the average size of holdings was increasing, which enlarged the number of potential employers.¹⁷¹ None of these has provided measurable evidence for how much they changed the demand in the long run. It does not seem that demand for labour ever had a permanent influence on wage rates in the late middle ages. Therefore, historians, like Postan, were right to marginalise the effects of demand in the discussion of the secular trends in wage rates.¹⁷²

2.4 Conclusion

The above model provides a theoretical apparatus to perceive determination of wages from the demand side. It provides a possible explanation of why historians think casual wage evidence cannot precisely indicate economic happenings over short periods. It also implies that over a long period when the supply or the demand was permanently shifted the wage rate would change accordingly. This theoretical model, nevertheless, leads to more questions. In the above discussion of the first dimension of the labour market, it has been demonstrated that the composition of the workforce

¹⁷¹ Dyer, *Standards of living*, pp. 141-143; idem, *Lords and peasants*, pp. 150-152; E. Miller, 'Tenant farming and tenant farmers: Yorkshire and Lancashire', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 601-602; R. Britnell, 'Tenant farming and tenant farmers: Eastern England', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), p. 617; C. Dyer, 'Tenant farming and tenant farmers: the West Midlands', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 636-637; P. D. A. Harvey, 'Tenant farming and tenant farmers: the Home Counties', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 662-664; A. Watkins, 'Cattle grazing in the forest of Arden in the later middle ages', *Agricultural History Review*, 37 (1989), p. 21.

¹⁷² M. M. Postan, 'Money, population and economic change in late medieval Europe: note', *Economic History Review*, 2nd ser., 12 (1959), p. 78.

was a critical factor that influenced the demand for casual labour on the farm. This leads to the observation that the employer could exploit this structural factor to reduce financial burden. It brings about the questions of how this manipulation was done and how much it influenced the employment of casual labour in comparison with the others. Moreover, it has been illustrated that during the year the employment of casual labourers was concentrated in one operation. This provides reasonable grounds for questioning the overall importance of casual labour and for reconsidering to what extent casual wage evidence may represent the wide economy. Lastly, the discussion has illustrated that the activities of casual labourers were mostly limited to a certain group of operations. Apparently, the other types of labourers were responsible for other operations, such as ploughing and carriage. How those tasks were performed and by whom deserve close examination. Fortunately, the source material provides sufficient evidence for studying those subjects.

Accordingly, the manorial accounts provide necessary information for examining 'seasonality of agricultural casual labour'. To serve this purpose, the seasonal costs of labour and the amount of demand in these operations could be used to elaborate the seasonal distribution of labour inputs and their composition. With the help of narrative material that indicates the farming schedule, the data should illustrate the monthly variations in the demand for labour, as shall be demonstrated in Chapter 3.

The same source material allows us to quantitatively analyse the employment and the importance of labour services. It has been acknowledged that labour services were a desirable replacement for casual labourers in the aftermath of the Black Death; while it is also known that they were being abandoned in demesne farming during this period. Since detailed information is available, it should be worthy to reconsider how extensively labour services were used during the fifteenth century, their importance in comparison with paid labourers, and to evaluate the impact of the abandonment of labour services on the use of paid labour on manorial demesnes. The analysis shall be presented in Chapter 4.

Thirdly, although the activities of the *famuli* were usually unrecorded because they were salaried rather than paid on the working site, with the understanding of the use of casual labourers and labour services it is possible to assess the importance of the *famuli* in agriculture. In particular, by using the relatively detailed records from the five Norfolk demesnes, the two Durham demesnes and the two Battle Abbey home farms at Alciston and Lullington, it is possible to expand our knowledge of the use of the *famuli* in seasonal operations further. Most of all, a series of detailed accounts, the Monkton Deverill accounts, provides us with a chance to examine how the *famuli* were employed in collaboration with casual labourers, as shall be demonstrated in Chapter 5.

Lastly, the trend in wage rates is a topic that has been deeply ploughed, but no one has produced a comparative study to casual labour wages and the salaries of the *famuli*. Knowing that casual wage evidence has its limitations in interpreting changes during short periods, it might be worthy to try using the other types of wage data that are of the *famulus*'s salary. Fortunately, the manorial accounts provide detailed and consistent source material for that purpose. It is possible that in the context of the fifteenth-century agricultural wage labour, the data of their salary could serve as a suitable indicator of the labourer's income and of the economy over a shorter period like the fifteenth century.

Chapter 3 Seasonality of agricultural casual labour

Nature was the supreme determinant in pre-mechanised agriculture not only by influencing farming output, but also by dictating the calendar of farming activities that was defined by the growing season of grain, regulated by the cyclical nature and weather, and limited by precipitation, all of which decided when the work should start and how much labour was needed. In the whole middle ages, the periodical demand for labour was reflected in the expenditure structure of the manorial account roll. The schedule of fifteenth-century farming operations is outlined by this practice; and the record of the seasonal costs of labour provides a channel for quantitatively examining the seasonal labour input through the value of paid labour.

Because grains grew following their natural process, the need for taking care of them during certain periods of the growing process generated the varying demand for labour and created seasonal labour markets. This is the rule of agricultural labour; this is the precondition for peasants to find employments in the agricultural sector and for employers to hire and to satisfy scheduled demands. Because of this natural cycle, the agricultural labour market fluctuated during the year, generating varying demands.¹⁷³

Therefore, balance between supply and demand for labour varied across the year; and

¹⁷³ Several historians have already been aware of the varying demand during the year. D. L. Farmer, 'Prices and wages, 1350-1500', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 467-474; R. H. Britnell, 'Specialization of work in England, 1100-1300', *Economic History Review*, 2nd ser., 54 (2001), p. 8.

availability of job opportunities varied across the year. It is tempting for us to question to what extent the wage rates a labourer earned in seasonal operations represent his income. Moreover, due to the varying demand, the cost of labour should change accordingly. We are interested in the distribution of the cost and in how the employer tackled the high cost, such as in the harvest. These two interests lead to a question: when and how much demand for labour was generated? The purpose of this chapter is to re-construct the farming schedule with quantitative information to demonstrate the varying demand during the year.

‘The husbandman’s year’ is a familiar subject for historians. Detailed studies like G. C. Homans’s follow Christian holidays to illustrate the farming practice as well as the village activities one by one.¹⁷⁴ Agricultural definitions of Michaelmas (the start of a new farming year by the winter sowing), Martinmas (the end of the winter sowing), Candlemas (the start of the spring sowing), Easter (the end of the spring sowing), Lammas (the start of the harvest season), etc. are well presented.¹⁷⁵ It is known that, to satisfy the high demand in the harvest, the labourers, such as minors, women, and those, who were less capable, were employed; and to attract labourers to work in the harvest exceptional arrangements were made to boost the wage.¹⁷⁶ It is

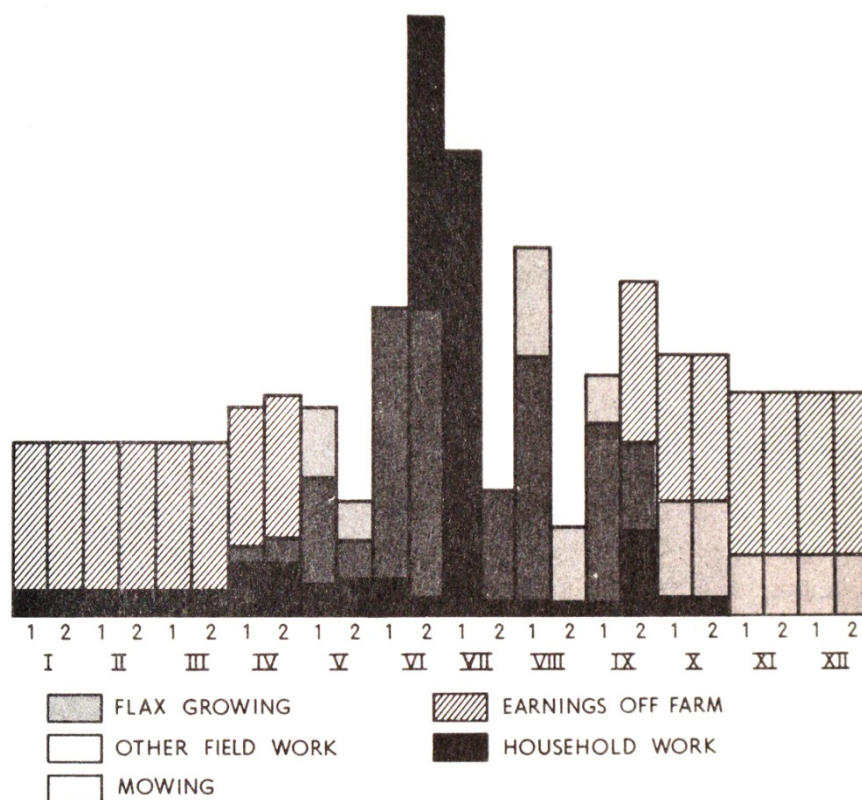
¹⁷⁴ G. C. Homans, *English villagers of the thirteenth century* (Cambridge, Massachusetts, 1942), pp. 353-381; H. S. Bennett, *Life on the English manor: a study of peasant conditions, 1150-1400* (Cambridge, 1937), pp. 77-86; B. A. Hanawalt, *The ties that bound: peasant families in medieval England* (New York, 1986), pp. 124-130

¹⁷⁵ Homans, *English villagers*, pp. 354-356, 363-365, 370-371.

¹⁷⁶ W. O. Ault, *Open-field husbandry and the village community: a study of agrarian by-laws in medieval England* (Philadelphia, 1965), pp. 55, 72, 80, 95; D. Youngs, ‘Servants and labourers on a late medieval demesne: the case

known that threshing was done in the slack season; and it is understood that weeding and haymaking were done in the summer. An approach, nevertheless, is needed to demonstrate the differences in the demand between operations to produce quantitative representation of seasonal labour markets. Chart 3.1 reproduces a figure provided by A. V. Chayanov, quantitatively illustrating distribution of labour over the year. The chart provides the information of when and how much labour power was demanded from a peasant, who worked on his own farm and for hire. In the context of medieval

Chart 3.1 A. V. Chayanov's Chart of Distribution of work by half-monthly periods



Source: A. V. Chayanov, D. Thorner, B. Kerblay, and R. E. F. Smith (eds.), *A. V. Chayanov on the theory of peasant economy* (Wisconsin and Manchester, 1986), p. 151.

of Newton, Cheshire, 1498-1520', *Agricultural History Review*, 47 (1999), p. 157.

agricultural wage labour, this quantitative analysis shall allow the researcher to observe differences in demand as in support of our questioning over the traditional use of casual wage evidence. The result shall also provide a basis for further analyses that require the information of the farming schedule.

The Methodology is that the wage rate could only be a proper indicator of the labourer's income if seasonal employment was a stable source of income; and only if casual labourers were the main labour force in the operation, so that the worker was likely to be adequately employed. In the meanwhile, the labourer's income was the employer's financial burden. If the employer managed his estate rationally, it should be perceivable that he manipulated different types of labourer to reduce the cost. Therefore, this research focuses on examining the distribution of labour over the year and analysing the composition of the workforce in individual operations. For this purpose, construction of a farming calendar is essential for identifying when the opportunities were available and how long the work-period was. The construction of the calendar is the purpose of the first section. The second section is dedicated to examining the distribution of labour using the said calendar. In the last section it will demonstrate that the composition of the workforce is more complicated than it has been considered. In the end, I will contend that the employment of casual labour is overstated in existing studies of medieval economy because of the uneven labour

market. The conclusion will also establish the need for examining the other two types of labourer in the following chapters, because, as it shall be demonstrated in the third section, the demesne manager tended to reduce the cost of labour in the busy season by using unpaid and salaried labourers.

3.1 Reconstruction of a fifteenth-century farming calendar

| | |
|-----------|---|
| Januar | By thys fyre I warme my handys |
| Februar | And with my spade I delfe my landys |
| Marche | Here I sette my thynges to sprynge |
| Aprile | And here I here the fowlis synge |
| Maij | I am lyght as byrde in bowe |
| Junij | And I wede my corne wel I-now |
| Julij | With my sythe my mede I mawe |
| Auguste | And here I shere my corne full lowe |
| September | With my flayll Ierne my brede |
| October | And here I saw my whete so rede |
| November | At Martynsmasse I kille my swine |
| December | And at Cristemasse I drynke redde wyne ¹⁷⁷ |

B. A. Hanawalt's quotation of a medieval folksong indicates the agricultural activities that happened in June (weeding), July (haymaking), August (harvesting), September (threshing), and October (sowing). In terms of the farming schedule, this song is incomplete in several ways. In medieval England, there were two main sowing seasons, but only one season is revealed above. Besides sowing, intense ploughing

¹⁷⁷ Hanawalt, *The ties that bound*, p. 125.

and harrowing were demanded during sowing; and the tedious ploughing lasted for several months. As for threshing, the above statement only accounts for the threshing task before the winter sowing for preparing seed. This simplistic image is found in non-documentary sources, like the Limbourg Brothers' *Book of Hours* that gives five operations during the year in the Netherlands and possibly in Burgundy.¹⁷⁸ These texts were not produced to present the detail of farming activities. The detail is not easy to find in documentary sources either. The accounting practice required the accountant to record expense and receipt, but did not encourage him to write down the date of the event. In the fifteenth-century source material, the date is available only in a few occasions, *e.g.* the Catesby manorial account.¹⁷⁹

Homans's use of an agricultural handbook composed by T. Tusser, on the other hand, has demonstrated a workable approach to re-construction of the calendar. Yet in this section, it is intended to compose a calendar on a monthly basis for quantitative analysis. Thus, three more technical handbooks are used together with the information found in manorial accounts. Among the four books, Tusser's *Five Hundred points of good husbandry* (1557), J. Mortimer's, *The whole art of husbandry* (1716) and A. Young's *The farmer's calendar* (1809) elaborate monthly activities; A. Fitzherbert's *Book of husbandry* gives thematic discussion of early farming tasks, demonstrating

¹⁷⁸ They are ploughing, haymaking, the corn harvest, the grape harvest, and harrowing, quoted from Web Gallery of Art, Limbourg Brothers, <http://www.wga.hu/html/l/limbourg/index.html>.

¹⁷⁹ The National Archives (hereafter TNA), SC 6/946/24.

much detail of early farming technology.¹⁸⁰

In the course of the farming year, ploughing for the winter crops was the first operation. It was done before Michaelmas or about. Threshing for the seed had to be done before it. By Michaelmas the schedule moved on to sowing of the winter grain, which should finish by Halloween. Women and children were supposed to help chase away birds when men ploughed and harrowed.¹⁸¹ In November, threshing of dredge and barley ought to start for malting, but wheat, apart from seeds, was suggested to remain unthreshed until March for the better market.¹⁸² December was the period of settling livestock, when arable activities mostly ceased. The new farming session started after Epiphany and ploughing for the spring grain was the first task.¹⁸³ The spring ploughing was at its height in February, March, and could last as late as May; in this period barley, oats and legumes were sown.¹⁸⁴ Thenceforth, fallow-ploughing was the task that demanded ploughs, though in some places people grew legumes or rested the land. The first fallow-ploughing might start in April; the second one was carried on a month after in May; and the third one in July.¹⁸⁵ May was the season of weeding crops;¹⁸⁶ and tidying grasses was done in June.¹⁸⁷ The first harvest, which

¹⁸⁰ T. Tusser and W. Mavor (ed.), *Five hundred points of good husbandry 1573* (London, 1812); A. Fitzherbert and W. W. Skeat (ed. and intro.), *The book of husbandry, reprinted from the version of 1534* (London, 1882); J. Mortimer, *The whole art of husbandry* (London, 1716); A. Young, *The farmer's calendar* (London, 1809).

¹⁸¹ Tusser, *Five hundred points*, pp. 16-18, 31-33.

¹⁸² Ibid, pp. 46-47, 50-51.

¹⁸³ Ibid, pp. 98-99.

¹⁸⁴ Ibid, pp. 106-107, 125, 128-129.

¹⁸⁵ Ibid, pp. 135-136, 155-156, 171.

¹⁸⁶ Ibid, pp. 151, 152, 153.

¹⁸⁷ Ibid, pp. 162, 165-167.

was of hay, began in July.¹⁸⁸ August was the season when the peasant got paid by harvesting; carriage and the work in barn were sorted into the post-autumn tasks.¹⁸⁹

Here ends the sixteenth-century farming cycle.

This arrangement is fairly easy to understand as one may see in Table 3.1. The basic rule is that, there were two types of grain that demanded different growing periods, but were both harvested at the same time. To attend crops and to process the produce, casual labourers were demanded. The utmost concern of the farmer was the soil, which was a main determinant of arable production. Ploughing was an essential operation for softening the soil during the sowing operation and for removing weed on the fallow. Manuring was carried on with ploughing. The practice of ploughing might vary in different places, but the purpose is the same – to keep the land fertilised and tidy. Fitzherbert explained that fallow-ploughing for all grains should work right after the spring sowing throughout the summer, but not in the winter at all, because long exposure of ploughed soil to rainfall would derogate the soil. By him, the second fallowing, called the ‘first stirring’, was delayed to June; and the ‘second stirring’, *i.e.* the third fallowing, was performed in August or early September.¹⁹⁰ Mortimer gave a similar opinion of the fallow-ploughing practice in *c.* 1700.¹⁹¹ Overall, the soil alone created considerable demand for labour even during the harvest. On the well-prepared

¹⁸⁸ Ibid, pp. 169-171.

¹⁸⁹ Ibid, pp. 182-189.

¹⁹⁰ Fitzherbert, *The book of husbandry*, pp. 25-26, 32, 39.

¹⁹¹ Mortimer, *Art of husbandry*, pp. 370, 374.

soil grew the grain; and the operations related to harvesting and processing crops took place in due course.

Table 3.1 Calendar of traditional operations in pre-mechanised English agriculture

| | Ploughing & fallowing | Sowing & harrowing | Mowing & weeding | Harvesting & haymaking | Threshing |
|-----------|--------------------------|-----------------------|---------------------|---------------------------|-----------|
| September | ■ ■ □ ■ | ■ ■ □ ■ | □ □ □ □ | □ □ □ □ | □ □ □ □ |
| October | ■ ■ □ ■ | ■ ■ □ ■ | □ □ □ □ | □ □ □ □ | □ □ □ □ |
| November | ■ ■ □ □ | □ □ □ ■ | □ □ □ □ | □ □ □ □ | ■ ■ □ ■ |
| December | □ □ □ ■ | □ □ □ □ | □ □ □ □ | □ □ □ □ | ■ □ □ □ |
| January | ■ ■ ■ ■ | □ □ □ □ | □ □ □ □ | □ □ □ □ | ■ □ □ □ |
| February | ■ ■ ■ ■ | ■ □ □ ■ | □ □ □ □ | □ □ □ □ | □ □ □ □ |
| March | ■ ■ ■ ■ | ■ ■ □ ■ | □ □ □ □ | □ □ □ □ | □ ■ □ ■ |
| April | ■ ■ ■ ■ | ■ ■ □ ■ | □ □ □ □ | □ □ □ □ | □ □ □ □ |
| May | ■ ■ ■ □ | □ ■ □ ■ | ■ ■ ■ ■ | □ □ □ □ | □ □ □ □ |
| June | ■ □ ■ ■ | □ □ □ □ | ■ ■ ■ ■ | □ □ □ □ | □ □ □ □ |
| July | ■ ■ □ ■ | □ □ □ □ | ■ □ □ □ | □ ■ ■ ■ | □ □ □ □ |
| August | □ □ ■ ■ | □ □ □ □ | □ □ □ □ | ■ ■ ■ ■ | □ □ □ □ |

Note: box 1 denotes the opinion given by Young; box 2, by Tusser; box 3, by Fitzherbert; box 4, by Mortimer.

Sources: T. Tusser and W. Mavor (ed.), *Five Hundred points of good husbandry 1573* (London, 1812); A. Fitzherbert and W. W. Skeat (ed. and intro.), *The book of husbandry, reprinted from the version of 1534* (London, 1882); J. Mortimer, *The whole art of husbandry* (London, 1716); A. Young, *The farmer's calendar* (London, 1809).

How is this schedule a valid calendar for studying fifteenth-century agriculture?

Firstly, by looking forward to the nineteenth century for Young's detailed report, it is easy to recognise the persistence of the farming cycle that made the above arrangement rather stiff even after 250 years. In the early nineteenth century, threshing was mainly a winter operation between November and January.¹⁹² Between

¹⁹² Young, *The farmer's calendar*, pp. 25, 563, 579.

February and April they sowed the spring grain.¹⁹³ Mowing and weeding were performed between May and July.¹⁹⁴ The harvest happened in August as traditional, but the employer should plan the hire of harvesters around Pentecost.¹⁹⁵ The winter grain was sown in the late September or October.¹⁹⁶ Ploughing was a year-round task that seems to have only ceased in August in this account.¹⁹⁷ The difference recognised in Young's observation is the advancement of sowing barley due to new farming technology.¹⁹⁸ In Table 3.1, when Young's report is included, the farming schedule does not have visible changes. The same can be found in the manorial accounts that preserve dating details for the operations of the harvest, threshing, and ploughing.

The record of fifteenth-century harvest activities further supports the persistence of this farming schedule. The operation was conducted like a ritual, regularly starting on 1 August, which was also known as Lammas, *Gula Augusti*, and the feast of St Peter in Chains. The date was so certain that it was used as a popular ending date in fixed-term contracts, with a strong implication of readying workers for the upcoming harvest. The length of the season varied a little. Including the post-autumn work, it was six weeks on the Battle Abbey's estate in East Sussex or eight weeks at Bromham

¹⁹³ Ibid, pp. 70-75, 78, 111-112, 119-120, 197.

¹⁹⁴ Ibid, pp. 257, 355-371, 427-428.

¹⁹⁵ Ibid, pp. 409-410, 438-449.

¹⁹⁶ Ibid, pp. 468, 547.

¹⁹⁷ Ibid, pp. 29-32, 273, 373, 409, 429, 491, 545-548, 559, 576-578, 585.

¹⁹⁸ Ibid, pp. 70-75; Mortimer, *Art of husbandry*.

(Wilts.) and at Ormesby St Margaret (Norfolk).¹⁹⁹ Most of the post-autumn work was done by the *famuli*; and the work-period for casual labourers was shorter, normally one month that included all sub-tasks of mowing, reaping, binding, collecting, and carrying. On the Ormesby St Margaret demesne in 1425, 34 individuals were hired, among whom 17 were reaping and mowing ‘for four weeks’; and the rest worked by the day.²⁰⁰ On another Norfolk demesne farm, Plumstead, in 1417 there were ‘eleven reapers and two mowers working for four weeks and four days’.²⁰¹ The period of the sub-tasks is illustrated in the Catesby (Northants.) account roll of 1448/9, when 15 casual labourers were hired in the harvest. Reaping and mowing were finished in one week; the binding and the collecting tasks were allowed up to 24 days.²⁰² Generally speaking, casual harvest labourers were only used in August in the seigniorial sector.

As for threshing, Farmer has put forward an assumption that this task was done at the time when the grain market was good, but the practical arrangement was rather complicated and was determined by a number of factors.²⁰³ Threshing for seed was necessary in the late August or September. At Ormesby St Margaret, for example, two threshers were included in the autumn work in 1435; in 1409/10 at Pittington, 27qrs out of the total wheat produce of 28qrs was threshed in the winter sowing (*tempore*

¹⁹⁹ Brandon, however, has reported that on Battle Abbey’s estate in Sussex, the period was 5 weeks, see P. F. Brandon, ‘Demesne arable farming in coastal Sussex during the later middle ages’, *Agricultural History Review*, 19 (1972), p. 118.

²⁰⁰ TNA, SC 6/939/2.

²⁰¹ Norfolk Record Office (hereafter NRO), DCN 60/29/44.

²⁰² TNA, SC 6/946/24.

²⁰³ Farmer, ‘Prices and wages, 1350-1500’, p. 468.

seminacionis frumenti).²⁰⁴ Malting was another reason to rush this operation because a large amount of barley had to be threshed in November in the places where brewing was a major industry, like Norfolk. In 1437, at Ormesby St Margaret, 303qrs of barley were threshed and handed in to the malt house before the heavy winter.²⁰⁵ Apart from these special arrangements, threshing belonged to the slack season. At Pittington, in 1390/1, John Carter was hired to thresh for nine weeks. On the same demesne in 1427/8, Thomas Cowherd worked over 104 days as a ‘thresher and worker’ between Martinmas and Pentecost.²⁰⁶ The two cases suggest that the workers worked during the winter, apparently not intensely. The Catesby account indicates that day-threshers were hired in August, September, and October in 1448; and in January and March in 1449 to thresh small amounts of grain individually.²⁰⁷ This arrangement supports the traditional knowledge that threshing was worked during the slack season and was not rushed. In some places the surge in threshing labour in November created considerable demand; but even so people did not have apparent reasons to rush the threshing of the rest of the grain. For the convenience of analysing the data it is tempting to accept the old assumption and to spread the threshing labour over the period after the harvest and before the spring sowing. In this instance, I separate the

²⁰⁴ TNA, SC 6/939/10; Dean and Chapter of Durham Muniments (hereafter DCDM), Pittington Account Roll (hereafter PAR) 1409/10.

²⁰⁵ TNA, SC 6/939/12.

²⁰⁶ TNA, SC 6/939/10; DCDM, PAR 1390/1, 1427/8.

²⁰⁷ TNA, SC 6/946/24, SC 6/947/3.

operation into the months of September, October, November, February and March, to avoid the cold winter and the holiday in December and January.

The ploughing task, including sowing and fallow-ploughing, was the only task that might collide with other farming activities, as illustrated in Table 3.1. Usually, ploughmen were hired for the year. But fixed-term ploughmen, who worked for a certain number of months, were hired, too; and their contracts will help us identify the work-period of the ploughing task. The winter ploughing started around Michaelmas as on Monkton Deverill demesne, where a casual ploughman was hired in 1455 for one week before Michaelmas and three weeks after.²⁰⁸ The spring ploughing started around Candlemas (2nd Feb) as at Pittington, where William Porter's servant Robert drove the plough from Candlemas to 1 August in 1413.²⁰⁹ It was more common that they were employed for longer than a half year to cover both sowing seasons and to continue the operation on the fallow. On Longbridge Deverill parsonage, in 1406/7, 'a second plough was used between Michaelmas and the feast of St Barnabas (11th June) for 120 half-days', *i.e.* 120 out of 257 days until the traditional start of the weeding task on the feast of St Barnabas.²¹⁰ On the Alciston demesne in 1441-1446, several ploughmen were hired between Michaelmas and 1 August.²¹¹ It is not common in this source material, but ploughing might be performed during the harvest season. On the

²⁰⁸ Somerset Heritage Centre (hereafter SHC), T\PH\lon/2/11/9718.

²⁰⁹ DCDM, PAR 1412/3.

²¹⁰ SHC, T\PH\lon/2/8/9610.

²¹¹ East Sussex Record Office (hereafter ESRO), SAS/G44/94-98.

Flegg demesne, two *famuli*, who worked in the harvest regularly, were diverted to the plough in August in 1422.²¹² In the seigniorial sector, ploughing was likely a task required throughout the year with distinguishable busy seasons. A case from the Acton demesne, Suffolk, indicates that maintenance of ploughs was performed in October, December, February, April, May, July, and August, for the ploughs that were worn or broken in the task.²¹³ For this reason, in Table 3.2 ploughing is considered as a yearly and continuous operation. A half block is given to August and September to indicate the infrequent ploughing during the harvest. The half block is given to December and January to denote the cold weather and the frozen soil.

Table 3.2 A calendar of fifteenth-century English agriculture

| | Ploughing & fallowing | Weeding & haymaking | Harvesting | Threshing |
|-----------|-----------------------|---------------------|------------|-----------|
| September | ■ | □ | □ | ■ |
| October | ■ | □ | □ | ■ |
| November | ■ | □ | □ | ■ |
| December | ■ | □ | □ | □ |
| January | ■ | □ | □ | □ |
| February | ■ | □ | □ | ■ |
| March | ■ | □ | □ | ■ |
| April | ■ | □ | □ | □ |
| May | ■ | □ | □ | □ |
| June | ■ | ■ | □ | □ |
| July | ■ | ■ | □ | □ |
| August | ■ | □ | ■ | □ |

Sources: Please see the above discussion.

²¹² NRO, DN/EST 9/15.

²¹³ TNA, SC 6/989/16.

3.2 The uneven demand in agricultural labour markets during the year

The above calendar illustrates that the farming cycle generated a cyclical labour market over the year; and furthermore, our knowledge of agriculture suggests that the said market was uneven according to the process of crop-growing. Such a year-round, uneven market indicates that demand for agricultural labour was highly fluctuating across the year. This conception should pose a question to the existing knowledge of agricultural wage labour, which was established upon the basis of changes in the supply-side, *i.e.* population.²¹⁴ The purpose of this section is to demonstrate the said fluctuation in the demand-side by illustrating the monthly labour input.

Regarding the monthly labour input, the expenditure structure of the manorial account roll allows us to examine the cash value of the labour-power employed on the demesne. Because the wage rate was an agreement between the employer and the labourer, and because the wage rate roughly changed in accordance with the difficulty of the task, there is a reasonable link between the cost of labour and the physical input. On this basis, an attempt of converting the cost into the number of man-days has been done by E. Karakacili using the conversion ratios from a number of sources and studies.²¹⁵ In order to present the labourer's income and the financial burden of

²¹⁴ M. M. Postan, 'Some economic evidence of declining population in the later middle ages', *Economic History Review*, 2nd ser., 2 (1950), pp. 221-246; Hatcher, 'Aftermath', p. 8.

²¹⁵ E. Karakacili, 'English agrarian labor productivity rates before the Black Death: a case study', *Journal of Economic History*, 64 (2004), pp. 49-50; G. Clark, 'Productivity growth without technical change in European agriculture before 1850', *Journal of Economic History*, 47 (1987), p. 426.

the demesne, I intend to skip the conversion but directly use the record of the cost of labour; and only convert the value in selected cases to demonstrate the different input between operations. The following discussion of seasonal labour input is based on the farming calendar to demonstrate the cost in the operations of the harvest, of threshing and of weeding/mowing.

The market of harvest labour is notorious for its fierce competition because the work was so intensive and the time was so limited. The manager was even encouraged to look for labourers in the early summer.²¹⁶ The high demand allowed, and even needed, any able person to take part in the operation, though some could only handle less physically-demanding tasks, such as collecting and binding. Thus, the harvest opens the opportunity to women and children to earn extra income for the family.²¹⁷ This high demand makes the research of the labour market tricky. On the one hand, the intensive demand certainly forced the demesne manager to employ many labourers; on the other, the high cost of labour urged the manager to find a way to reduce the cost.

The expense on harvest labour usually constituted the highest cost of labour in the year, but inconsistencies are hardly rare in the record. At Acton (Suffolk) in 1409/10, a total of 253s 3d was spent in the harvest, as against 129s 5d in threshing

²¹⁶ Young, *The farmer's calendar*, pp. 409-410.

²¹⁷ G. E. Evans, *Ask the fellows who cut the hay* (London, 1956), pp. 85-87; Youngs, 'Servants and labourers', p. 157.

and 39s 1d in weeding/mowing.²¹⁸ At Elvethall (Durham), in 1447/8, 115s 8d was paid for the harvest labour in contrast to 19s for the threshing labour and 4s 11d for weeding/mowing.²¹⁹ At Hurdwick (Devon), in 1463/4, the threshing labour cost was about two-fifth of the harvest one (57s 3¾d vs. 142s 2d).²²⁰ This proportion changed on other manorial demesnes. At Ormesby St Margaret in 1451/2, the threshing labour cost was 81% of the harvest cost (57s 9½d against 71s 3½d).²²¹ At Meon (Hants.), the two labour costs were close (100s 14d for the harvest and 96s 4¾d for threshing).²²² And some interesting cases illustrate that this competitive labour market demanded a little money from the demesne. At Ecchinswell (Hants.) in 1409/10, only 16s 2d was paid, as against 35s 1¾d paid for threshing; or at Werrington (Devon) in 1453/4, 19s was spent in the harvest and 31s 3¼d was paid for threshing.²²³ The same is found at Alciston, Lullington (Sussex), Ivinghoe (Bucks.) and several other places, where the cost of harvest labour was so small that it was not paid for casual labour at all.²²⁴ These inconsistent arrangements indicate that, despite the known fact that the harvest was busy, many demesne managers were able to reduce the cost by introducing other types of labourer into this operation; and some were even able to remove the cost of casual labour altogether.

²¹⁸ TNA, SC 6/989/13.

²¹⁹ DCDM, Elvethall Account Roll (hereafter EAR) 1447/8.

²²⁰ Devon Record Office (hereafter DRO), D52/1 Hurdwick 1463/4.

²²¹ TNA, SC 6/940/10.

²²² Hampshire Record Offices (hereafter HRO), 11M59/B1/156.

²²³ Ibid.

²²⁴ For example, Alciston, ESRO, SAS/G44/103; Lullington, TNA, SC 6/1027/3; Ivinghoe, HRO, 11M59/B1/156.

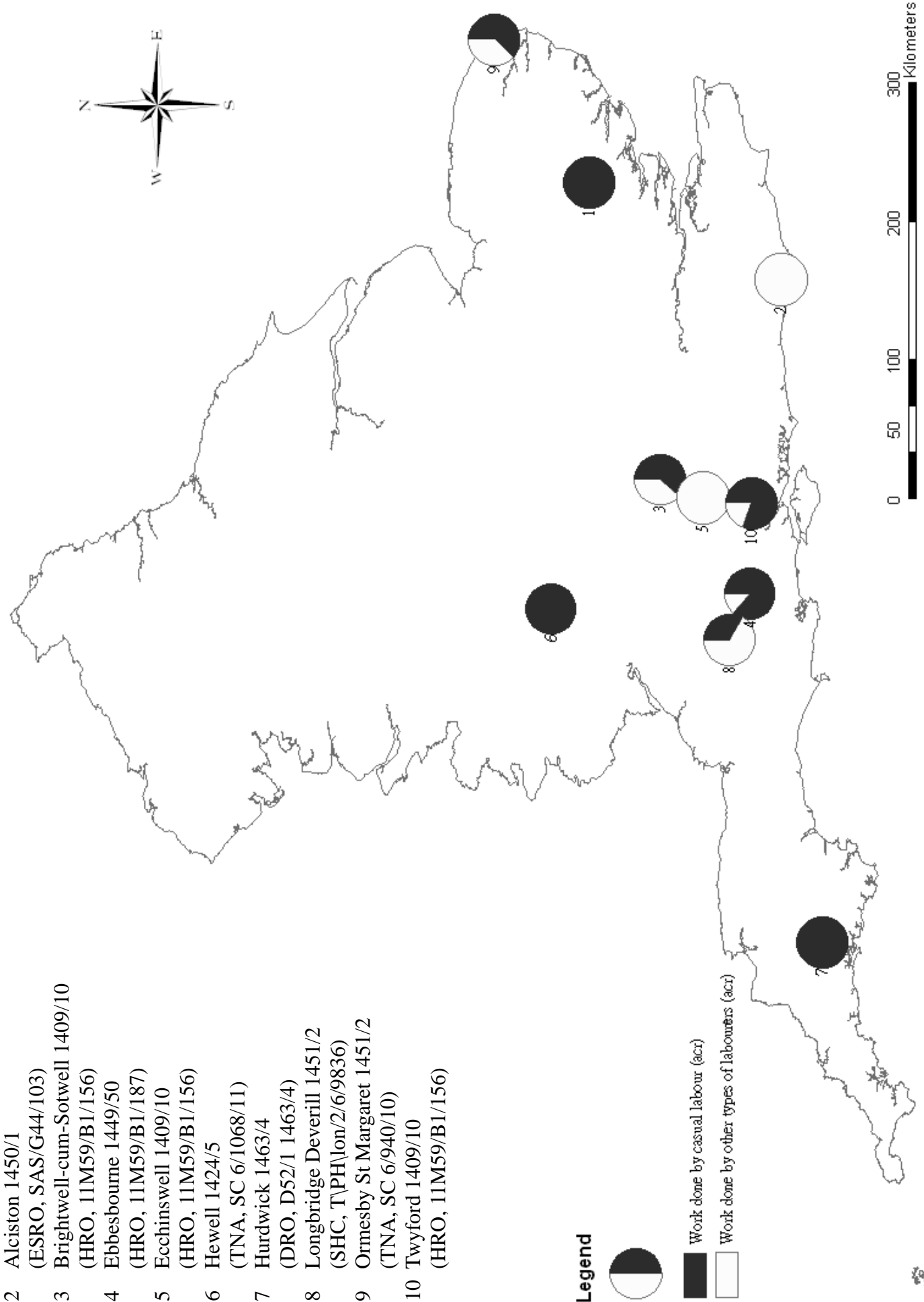
The cost of harvest labour stood for a certain amount of harvest work; and the low cost was a result of low casual labour input. As the sown acreage (supposedly the entire sown field was harvested) stood for the overall labour input, the paid acreage in the harvest accounted for the proportion of work done by casual labourers. On this basis, Map 3.1 is composed to demonstrate that on many manorial demesnes a good part of the harvest work was not done by casual labourers. The sample in the Map is simplified to avoid overlap, whilst the sample is large enough to demonstrate known variations. And the sample only includes the cases in which the portions of work are clearly indicated. Overall, Map 3.1 illustrates that only on three of the ten demesnes casual labourers were responsible for the whole reaping, with the *famuli* working as support. Accordingly the busiest season in the year did not necessarily generate the highest demand for casual labour in this century.

As for the threshing labour input, it has been remarked by J. E. Thorold Rogers and D. L. Farmer that the record of the cost of threshing labour is a high quality source material for quantitative analysis.²²⁵ This opinion is correct in consideration of the written record. The data of threshing labour consist of the value of the piece-work, the number of piece-works that were done by casual labourers, and the total amount of grain that had to finish. This source material provides some easy figures to collect

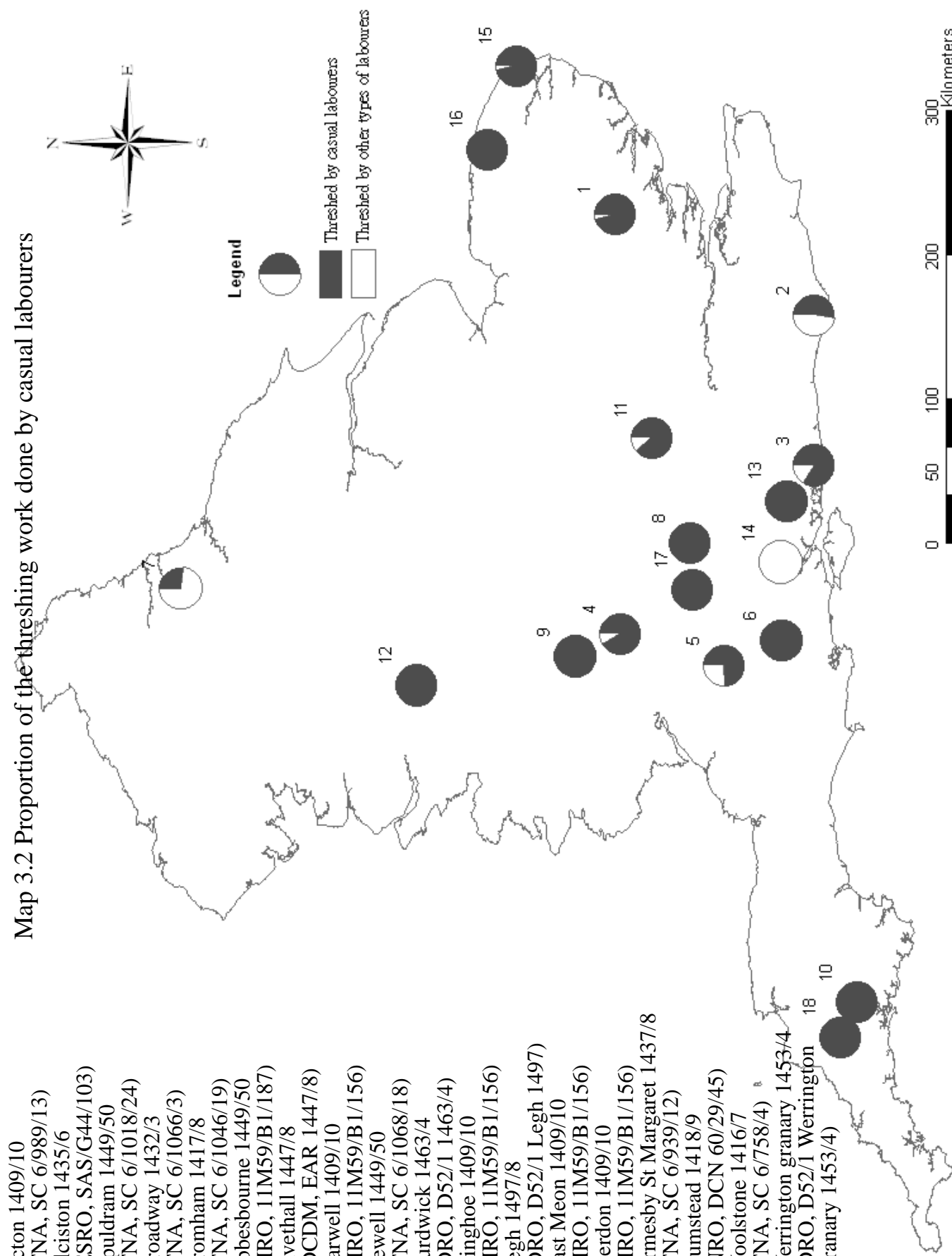
²²⁵ Farmer, 'Prices and wages, 1350-1500', p. 468; J. E. Thorold Rogers, *A history of agriculture and prices in England*, 1 (London, 1866), pp. 265-266.

Map 3.1 Proportion of the harvest work done by casual labourers

- 1 Acton 1409/10
(TNA, SC 6/989/13)
- 2 Alciston 1450/1
(ESRO, SAS/G44/103)
- 3 Brightwell-cum-Sotwell 1409/10
(HRO, 11M59/B1/156)
- 4 Ebbesbourne 1449/50
(HRO, 11M59/B1/187)
- 5 Ecchinswell 1409/10
(HRO, 11M59/B1/156)
- 6 Hewell 1424/5
(TNA, SC 6/1068/11)
- 7 Hurdwick 1463/4
(DRO, D52/1 1463/4)
- 8 Longbridge Deverill 1451/2
(SHC, T\PH\lon/2/6/9836)
- 9 Ormesby St Margaret 1451/2
(TNA, SC 6/940/10)
- 10 Twyford 1409/10
(HRO, 11M59/B1/156)



- 1 Acton 1409/10
(TNA, SC 6/989/13)
- 2 Alclston 1435/6
(ESRO, SAS/G44/103)
- 3 Apuldram 1449/50
(TNA, SC 6/1018/24)
- 4 Broadway 1432/3
(TNA, SC 6/1066/3)
- 5 Bromham 1417/8
(TNA, SC 6/1046/19)
- 6 Ebbesbourne 1449/50
(HRO, 11M59/B1/187)
- 7 Elvethall 1447/8
(DCDM, EAR 1447/8)
- 8 Harwell 1409/10
(HRO, 11M59/B1/156)
- 9 Hewell 1449/50
(TNA, SC 6/1068/18)
- 10 Hurdwick 1463/4
(DRO, D52/1 1463/4)
- 11 Ivinghoe 1409/10
(HRO, 11M59/B1/156)
- 12 Legh 1497/8
(DRO, D52/1 Legh 1497)
- 13 East Meon 1409/10
(HRO, 11M59/B1/156)
- 14 Merton 1409/10
(HRO, 11M59/B1/156)
- 15 Ormesby St Margaret 1437/8
(TNA, SC 6/939/12)
- 16 Plumstead 1418/9
(NRO, DCN 60/29/45)
- 17 Woolstone 1416/7
(TNA, SC 6/758/4)
- 18 Werrington granary 1453/4
(DRO, D52/1 Werrington Granary 1453/4)



and manipulate. The threshing wage rate was consistent and steady on individual manorial demesnes. On the Ebbesbourne demesne (Wilts.), threshing a quarter of wheat was paid *3d*; a quarter of barley *2d*, and oats *1.5d*. This set of figures is a good measure for calculating how many quarters were finished by different types of labourer. In 1449/50, on the same demesne 45qrs 6bu of wheat, 66qrs of barley, and 29qr 2bu of oats were worked by casual threshers and none was done by any other type of labourer.²²⁶ At Elvethall, where threshing a quarter of wheat was paid *4d* and a quarter of barley *2d*, only 8qrs of wheat and 98qrs of barley were done by casual labourers in 1447/8. For this work, 19s was paid; in the meanwhile 35qrs 3bu of wheat, 41qrs of rye, 62qrs 4bu of barley, 41qrs dredge, and 55qrs 4bu of oats were threshed by other types of labourer. And this part of threshing work would be worth 51s 11*d* if it was done by casual labourers.²²⁷ With this method, we were able to produce Map 3.2 to illustrate the proportion of threshing work done by casual labourers. As above, the number of sample demesnes is reduced to avoid overlap. Map 3.2 confirms that threshing was mostly worked by casual labourers, with only a few exceptions.

The last set of casual wage data that is related to weeding and mowing has contributed a wage series in Farmer's chart, implying that they were important tasks

²²⁶ HRO, 11M59/B1/187.

²²⁷ DCDM, EAR 1447/8.

like threshing and the harvest. The evidence indicates otherwise. Mowing required a small labour force unless the demesne had to keep large flocks or to sell hay. At Elvethall in 1447/8, only five persons were hired to mow seven acres. At Pittington, slightly more than twenty man-days were employed.²²⁸ As for weeding, it was a task of removing thistles from the crops. It demanded less physical labour and was usually performed by women. At Pittington, in the accounts of 1406/7 and 1407/8, woman workers were weeding with men; and in 1383/4 eleven women accounted for the whole operation weeding for two days and receiving 2*d* each for each day.²²⁹ At Alciston ‘boys’ (*pueri*) were employed for this reason.²³⁰ At Elvethall, these two operations cost the demesne a small amount of money. And the cost remained low until 1490/1, when it rose to around 17*s*, an insignificant amount still.²³¹ Table 3.3 shows that the cost of weeding/mowing labour was low, except at a few estates like Alciston, Woolstone, and Ebbesbourne after 1441. There were some places in England, which are not included in our sample because the field was not cultivated, where haymaking was a serious task. On the Blakemere demesne (Salop) haymaking was its harvest work and a considerable amount of £4 11*s* 7½*d* was spent in the summer 1428.²³² There is the possibility that the cost was small because the majority

²²⁸ For example, DCDM, PAR 1406/7.

²²⁹ ‘*in xj mulieribus sarculatione bladorum per ij dies cuilibet per diem ij d*’. This is a rare case we can see the exactly number of working days of a certain task; DCDM, EAR 1383/4.

²³⁰ ESRO, SAS/G44/133, 134, 136.

²³¹ DCDM, EAR 1447, 1490.

²³² Shropshire Archives (hereafter SA), BP 212/82 1427.

of the operation was done by unpaid or salaried workers. The difficulty is that, in contrast to the record of the harvest and threshing, the information of total workload of weeding/mowing is not available at all. Thus, Table 3.3 is produced to demonstrate the insignificant amount of cost.

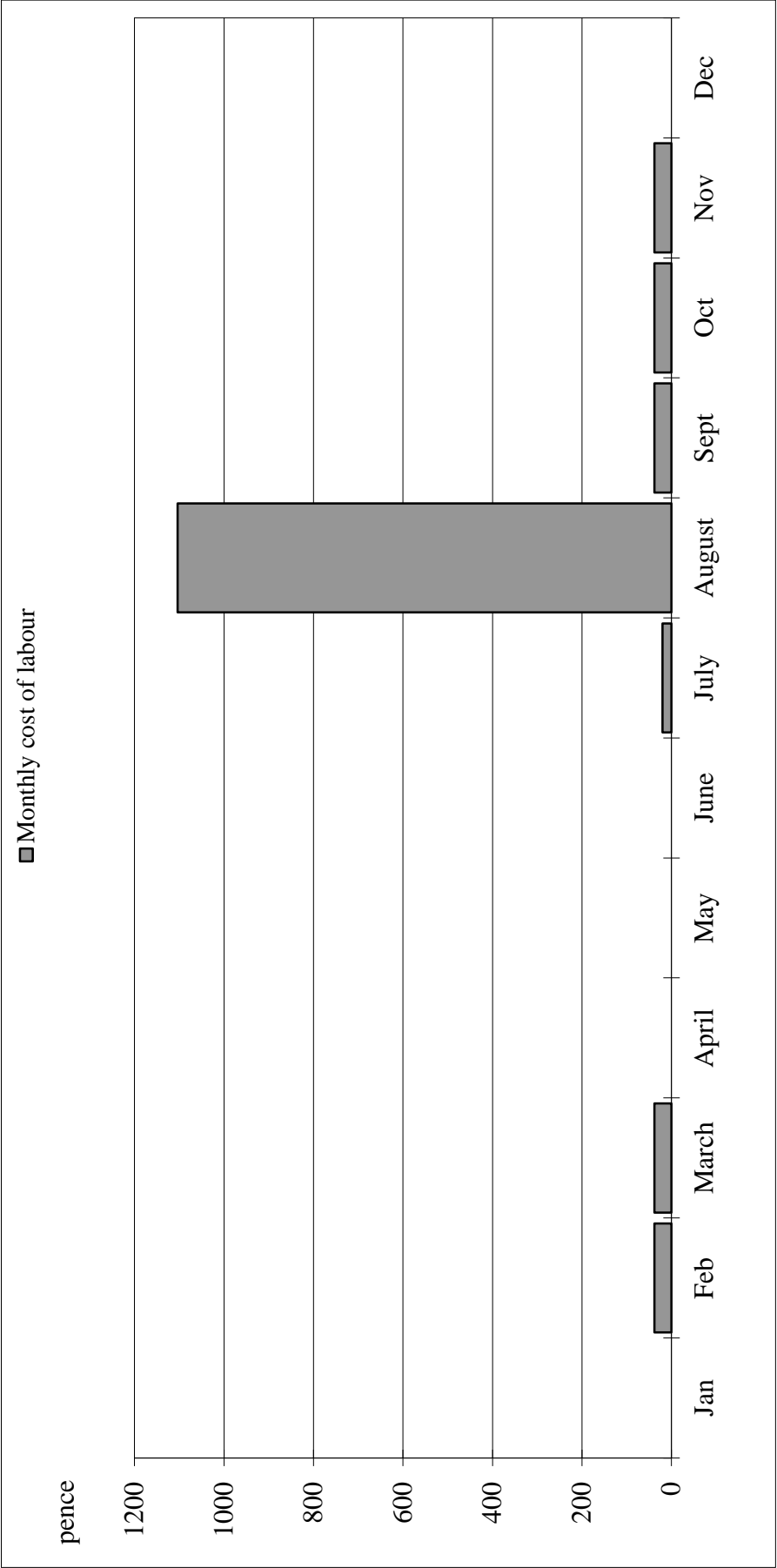
| Table 3.3 The cost of labour in the weeding and mowing operations | | | | | |
|--|--------|----------------------------------|--------|------------------------------|--------|
| Berkshire | | Hampshire | | Northampton shire | |
| Brightwell ^W 1409/10 | 3s 4d | Crawley ^W 1409/10 | 6s 8d | Catesby 1448/9 | 3s 8d |
| Harwell ^W 1409/10 | 10s | Ecchinswell ^W 1409/10 | 4s 6d | Shropshire | |
| Woolstone 1416/7 | 48s 7d | Marwell ^W 1409/10 | 18s 6d | Legh 1497/8 | 6s |
| Buckinghamshire | | Overton ^W 1409/10 | 16s 6d | Sussex | |
| Ivinghoe ^W 1409/10 | 4s | Twyford ^W 1409/10 | 23s | Alciston ^B 1450/1 | 48s 3d |
| Devonshire | | Norfolk | | Apuldram ^B | 3s 4d |
| Hurdwick ^T 1463/4 | 11s | Flegg ^N 1426/7 | 2s 2d | 1449/50 | |
| Werrington ^T 1453/4 | 16s | Martham ^N 1419/20 | 7s 3d | Lullington ^B | 19s 7d |
| Durham | | Ormesby St | 14s 9d | 1450/1 | |
| Elvethall ^D 1447/8 | 4s 11d | Margaret's 1451/2 | | Wiltshire | |
| Pittington ^D 1429/30 | 14s | Plumstead ^N 1418/9 | 8s 4d | Bromham ^B 1435/6 | 0 |
| Suffolk | | Taverham ^N 1416/7 | 7s | Downton ^W | 12d |
| Acton 1409/10 | 39s 1d | Worcestershire | | 1429/30 | |
| | | Hewell 1449/50 | 9s | Ebbesbourne ^W | 42s 4d |
| | | | | 1449/50 | |
| | | | | Longbridge | [] |
| | | | | Deverill ^G 1451/2 | |
| | | | | Monkton | 3s |
| | | | | Deverill ^G 1452/3 | |
| Note: B: Battle Abbey estate; D: Durham Priory estate; G: Glastonbury Abbey estate; N: Norwich Priory estate; T: Tavistock Abbey estate; W: Winchester estate. | | | | | |
| Sources: DCDM, EAR 1447, PAR 1429; DRO, D52/1 Hurdwick 1463/4, D52/1 Werrington 1453/4; Legh 1497/8; ESRO, SAS/G44/103; SHC, T\PH\lon/2/6/9836, T\PH\lon/2/11/9813; TNA, SC 6/758/4, SC 6/940/10, SC 6/946/24, SC 6/989/13, SC 6/1018/24, SC 6/1027/3, SC 6/1047/13, SC 6/1068/18; NRO, DN EST 9/17, NRS 20D2 5914, DCN 60/29/45, DCN 60/35/46, HRO, 11M59/B1/156, 173, 187. | | | | | |

A general feature is established by these data and indicates that there was a rather high demand for labour in August; in the other operations demand was insignificant. For example, on the Ebbesbourne demesne (Wilts.) in 1438/9, whilst £4 12s was spent in the harvest, threshing cost the demesne 18s ¼d and only 20d was paid for weeding and mowing.²³³ On the Hurdwick demesne (Devon) in 1470/1, the cost of harvest labour was £8 13s 9d, the cost of threshing and winnowing was 67s 3d, and the cost of weeding and mowing was 19s 3d.²³⁴ There is a sharp contrast between physical labour inputs between different farming operations. Taking the harvest labour and the threshing labour for example, in the Ebbesbourne case roughly 255 man-days were hired to harvest 102 acres, with the help of around 80 man-days that accounted for 32 acres from customary labourers; in the same year only roughly 63.16 man-days were hired to thresh 11qrs 6bu of wheat, 65qrs 1bu of barley, and 19qrs 4bu of oats. In the Hurdwick case, approximately 325 man-days were employed to harvest 130 acres and 114.75 man-days were hired to thresh 23qrs 1.5bu of wheat, 141qrs of oats and 33qrs of rye. The two demesnes did not usually use the *famuli* in reaping and threshing. Therefore, as a common pattern, the harvest employed the largest amount of labour. Chart 3.2 is produced to present this pattern built of the record of the Ebbesbourne demesne.

²³³ HRO, 11M59/B1/180.

²³⁴ DRO, D52/1 Hurdwick 1470/1.

Chart 3.2 The monthly cost of labour on the Ebbesbourne demesne, Wiltshire, 1438/9



Source: HRO, 11M59/B1/180.

Chart 3.2 illustrates the uneven market of agricultural casual labour during the year. The high cost of the harvest is conspicuous. Certainly, this high cost was a result of the high seasonal demand, which was legally acknowledged in 1445, when it ordered that the summer wage was ‘by the Day 2*d* with Meat and Drink, and without Meat and Drink 3½*d*’. The parliamentary statute further specifies that during the harvest a mower could receive up to 4*d* by the day with meals or 6*d* without meals; a reaper received 3*d* with meals, or 5*d* without. From Michaelmas to Easter, a period for threshing, an unskilled labourer was allowed to receive up to 3*d* without meals.²³⁵ The chart explains the village community’s intent to keep labourers in the village during the harvest season and explains the special law passed in 1388 to force urban workers to join the rural workforce in the harvest.²³⁶ The implication is that the harvest season was the single best chance for villagers to take on casual hire during the year. Outside this season, many of them were not able to find casual opportunities in agriculture even in the non-seigniorial sector, because the non-seigniorial sector shared the same farming schedule. Apart from main operations, sheep-shearing was another job opportunity, but the pay was small. At Alciston, washing and shearing ten sheep was only paid one penny; at Werrington, it was 1*d* for working 20 sheep.²³⁷ Ditching might pay well. At Werrington in 1498/9, 24*s* 10*d* was paid for ditching 149 virgates;

²³⁵ *Statutes of the Realm*, 2, p. 338.

²³⁶ Ault, *Open-field husbandry*, pp. 12-16; *Statutes of the Realm*, 2, p. 56.

²³⁷ For example, ESRO, SAS/G44/106; DRO, D52/1 Werrington 1451/2.

in 1470/1, 2s 6d was spent for 20 virgates, but this job was not a regular opportunity.²³⁸ There were a few more odd jobs in maintenance, and none of them was performed on a regular basis. Secondly, most villagers could not live upon casual hire in agriculture and landless common labourers (*communes laboratores*) constituted only a small part of the village workforce.

3.3 The comparative importance of agricultural casual labour

Casual labourers were only employed in agriculture in certain seasons during the year. In the meanwhile, other types of labourer were employed on the manorial demesne, too. Map 3.1 and 3.2 illustrate that on some demesnes, only a part of the work was done by casual labourers. How important were casual labourers in seasonal operations in comparison with the other types of labourers? Besides casual labourers, there were two types of labourer maintained on the manorial demesne: the *famuli* that were employed to work for the year and customary labourers who performed labour services as if paying part of rent. These two types of labourer are known to historians as replacements for casual labourers during the late middle ages when the wage rate was high. Customary labourers were less efficient, but they were cheaper;²³⁹ and most importantly they were bound by tenancy and providing the lord with a secure labour

²³⁸ DRO, D52/1 Werrington 1470/1, 1498/9.

²³⁹ B. F. Harvey, *Westminster abbey and its estates in the middle ages* (Oxford, 1977), p. 260; D. Stone, 'The productivity of hired and customary labour: evidence from Wisbech Barton in the fourteenth century', *Economic History Review*, 2nd ser., 50 (1997), pp. 641-642.

force to survive the difficult economy. The *famuli* were the permanent labour force. It is logical to employ them in seasonal operations when they were available.²⁴⁰ The *famuli*, different from casual labourers, received grain as a part of their wage apart from cash; and the value of the grain delivery was probably higher than the cash salary. This arrangement made the hire of the *famuli* attractive in the late middle ages because of the rising wage rate and falling grain price level.²⁴¹ In this context, their employment might be more important than the use of casual labourers.

The best method to examine the comparative importance of casual labourers might be to consider the proportion of work done by them on every sample demesne in detail and to compose a national pattern of the results. Fragmentations in the source material, however, hinder me from proceeding with this method. Instead, I intend to sort the sample demesnes into four categories to illustrate the pattern that heavily relied on casual labourers, the pattern that generously employed labour services, the pattern that employed the *famuli* extensively, and the pattern that used few casual labourers. By examining individual categories I will explain that most manorial demesnes, more or less, used all three types of labourers.

Map 3.1 and 3.2 illustrate that reliance on casual labourers varied significantly.

The varying reliance is expressed in the manorial account as the cost of labour. The

²⁴⁰ For the demonstration that the *famuli* were permanent farm workers, please see Chapter 5.

²⁴¹ Farmer, 'Prices and wages, 1350-1500', p. 481; P. J. P. Goldberg, 'What was a servant', in A. Curry and E. Mathew (eds.), *Concepts and patterns of service in the later middle ages* (Woodbridge, 2000), pp. 18-19; L. R. Poos, *A rural society after the Black Death: Essex 1350-1525* (Cambridge, 1991), pp. 222-223.

manorial account also provides the total amount of the work. The market value of the portion of work done by customary labour or by the *famuli* is estimated by means of the existing wage rates. For example, at Ebbesbourne in 1438/9, the harvest boons accounted for harvesting 33 acres of grain. 7s was paid for the refreshment, but if the work was done by casual labourers, the market value of it was approximately 27s 6d by paying 10d for harvesting each acre. This amount forms the difference between the actual cost of labour, *i.e.* £4 12s and the estimated overall cost, *i.e.* £4 12s plus 27s 6d.²⁴² Combining the two sets of data, Chart 3.3 is produced to present the proportion of work done by casual labourers in four patterns.

In summary of the series of charts, the first one illustrates the Hurdwick pattern (3.3a) that stands for the arrangement of using casual labourers to do all the work of weeding/mowing, threshing, and the harvest as far as the source material specifies. The Ebbesbourne case in Chart 3.3b presents the general pattern that the use of casual labourers could be significantly reduced when the *famuli* were involved in the labour services. The Ormesby St Margaret case (3.3c) illustrates that employment of operations. Fourthly, the Merdon case (Chart 3.3d) shows the other extreme of this matter, when the use of casual labourers was marginalised. The discussion is as follows.

²⁴² HRO, 11M59/B1/180.

Chart 3.3 The patterns of the monthly cost of labour in the fifteenth century

Chart 3.3a Hurdwick, Devon, 1463/4

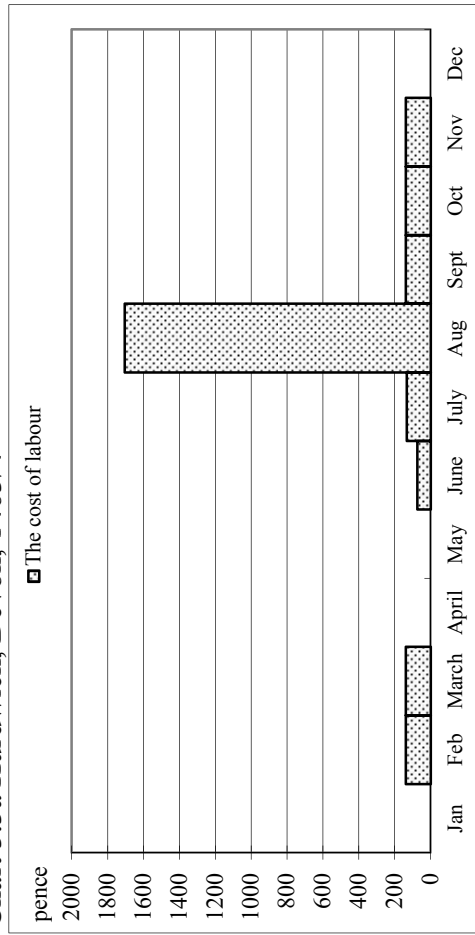


Chart 3.3b Ebbesbourne, Wiltshire, 1438/9

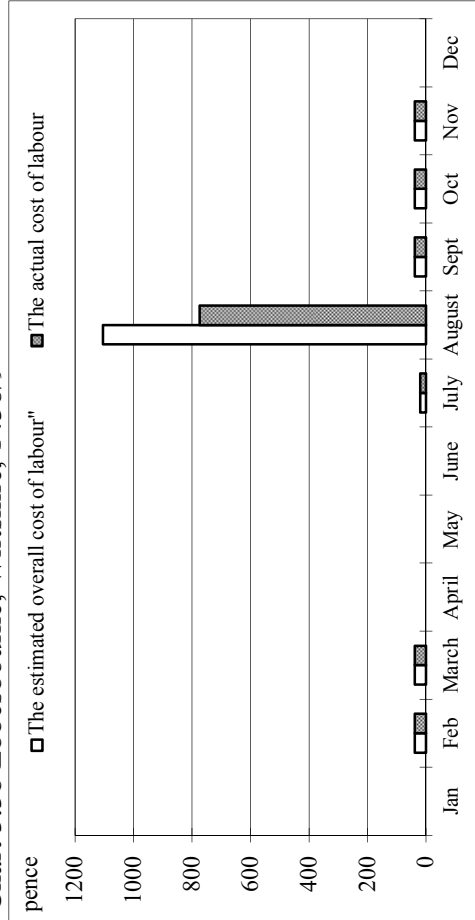


Chart 3.3c Ormesby St Margaret, Norfolk, 1423/4

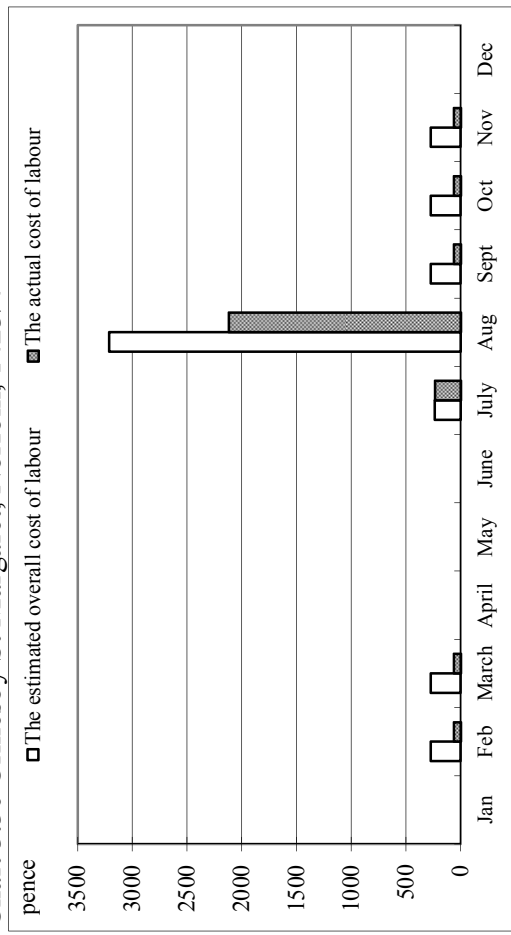
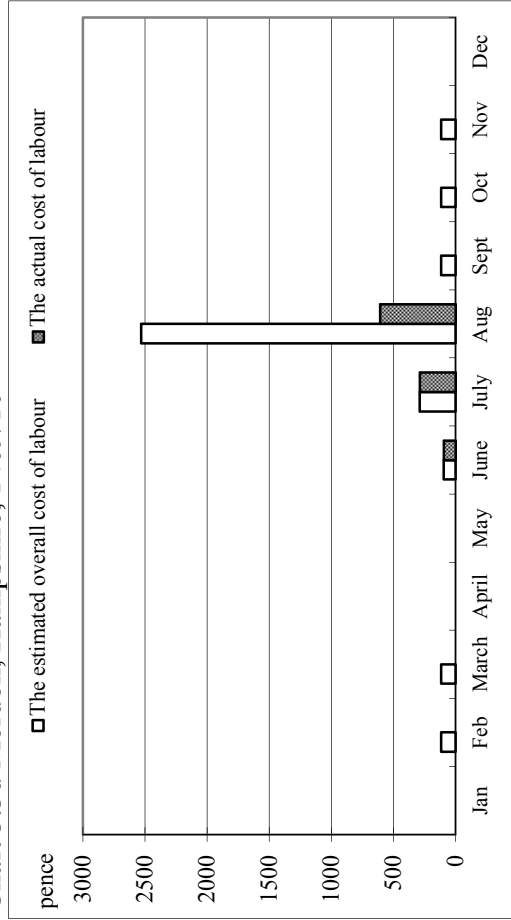


Chart 3.3d Merton, Hampshire, 1409/10



Source: See Appendix 1.

As far as is specified in the source material, the Tavistock Abbey's manorial demesne at Hurdwick used casual labourers as the main labour force in most farming operations. The same pattern is found on the estates of the bishop of Winchester at Droxford and North Waltham (Hants.) in 1409/10.²⁴³ On the Hurdwick demesne, all the grain produce was threshed by casual labourers and the task cost the demesne 57s 3¾d in 1463/4. The harvest was done by casual labourers with the help of the *famuli*, whose role is not specified in the source material, and it cost the demesne £7 2s 2d, including the purchase of foodstuffs. The same applied in weeding and mowing where the tasks cost the demesne 4s and 7s respectively. Apart from the main operations, 25s 9d was paid for ditching 103 virgates of trenches and 6s 2d was paid for shearing 690 sheep.²⁴⁴ Because of the reliance on casual labourers, the demesne was open to financial impacts caused by changing casual wage rates during the latter half of the fifteenth century. In 1463/4, the harvest wage rate, including the value of the meal, was about 11d per acre. The rate rose to 16½d in 1465/6, fell to 14d in 1481/2; and rose to 18d in 1490/1. Moreover, the already high threshing wage rates, *i.e.* 6d for threshing a quarter of wheat, 5d for rye and 2d for oats, rose to 7d/6d/2½d in 1488/9. The increase in the cost of labour in the two operations burdened the demesne with £3

²⁴³ M. Page, *The pipe roll of the bishopric of Winchester, 1409-1410, Hampshire Record series, 16* (Winchester, 1999), pp. 196-197, 249; HRO, 11M59/B1/156.

²⁴⁴ DRO, D52/1 Hurdwick 1463/4.

4s 1³/₄d extra.²⁴⁵ That was a visible difference in the cost of labour.

The Ebbesbourne pattern represents the use of customary labourers to take on a part of work, especially in the harvest. This demesne owned a limited but persistent amount of labour service. It is recorded before 1441 that the demesne had three harvest boons to harvest around 33 acres of grain; and two were maintained after 1441 to do 22 acres. It also employed customary labourers to plough 12 acres of the field; and used an uncertain amount of labour service in haymaking, of which we are only informed by the surge in the cost of casual labour in the record after 1441, when the cost rose from 20d to 43s 4d.²⁴⁶ In the harvest, a small amount of money was paid for the customary harvesters' refreshments, i.e. 7s before 1441 and 4s 8d after. If this portion was worked by casual labourers, it would be worth around 27s 6d and 18s 4d respectively. The use of labour services reduced a certain amount of the cost of labour.²⁴⁷ This was how seven other Winchester demesnes used customary labour in 1409/10. At Crawley, for example, 135 acres were harvested by casual labourers and 100 acres were done by labour services.²⁴⁸ It is noteworthy that in this pattern, the contribution of customary labourers varied and in some cases it could be considerable.

On the Glastonbury Abbey's estate at Longbridge Deverill (Wilts.), in 1422, 45 acres

²⁴⁵ DRO, D52/1 Hurdwick 1463/4-1497/8.

²⁴⁶ HRO, 11M59/B1/180, 185.

²⁴⁷ HRO, 11M59/B1/150-191.

²⁴⁸ Page, *The Pipe Roll*, pp. 382-383; HRO, 11M59/B1/156.

were reaped by casual labourers and 54¾ acres done by customary labourers.²⁴⁹ That is to say, 55% of crops were harvested by customary labourers; in the following year the percentage increased to 86%, because the sown acreage fell from 92 acres to 77 acres.²⁵⁰

The other way to reduce the high labour cost is the use of the *famuli*. The *famuli* have been thought to be mainly responsible for carriage in the harvest and rarely involved in threshing.²⁵¹ This was, indeed, the case on the Longbridge Deverill manor and the parsonage. The two demesnes shared two agricultural *famuli*, who ploughed for the manorial demesne and carted tithe grain for the parsonage.²⁵² On the other hand, wide use of the *famuli* is found at Ormesby St Margaret (Chart 3.3c), where, in 1423/4, the *famuli* threshed and winnowed 69qrs 2bu of wheat (88.15%), 275qrs 7bu of barley (82.94%), and 6qrs of oats (17.14%), as against 9qrs 2¼bu of wheat, 56qrs 6bu of barley, 29qrs of oats, and 32qrs 4bu of legumes threshed by casual labourers. They did much harvesting. In the summer of 1424, one bailiff, eleven *famuli*, two servants of theirs, and 20 workers contracted for four weeks, together with 33 day-labourers, reaping, binding and collecting grains.²⁵³ The *famuli* accounted for 39.6% of work counted by man-day as illustrated in Table 3.4. In general, they were

²⁴⁹ SHC, T\PH\lon/2/6/9816.

²⁵⁰ SHC, T\PH\lon/2/6/9816, 9869.

²⁵¹ D. L. Farmer, 'The *famuli* in the later middle ages', in R. Britnell and J. Hatcher (eds.), *Progress and problems in medieval England* (Cambridge, 1996), pp. 212-213.

²⁵² For example, at Longbridge Deverill in 1405/6, '*In expensa carrectarij custodis bovum et carucarij cariantium blada de dominico de campo in grangiam*'; SHC, T\PH\lon/2/8/9609.

²⁵³ TNA, SC 6/939/1.

responsible for around 40% of the harvest on the Ormesby St Margaret demesne. The accounting practice in Norfolk provides similar details on the Norwich Priory demesnes. The two Durham demesnes at Pittington and Elvethall did not specify their activities, but there was always a part of work that was not done by casual labourers and in several cases the accountant explained that ‘the rest was done by the *famuli*’. The Durham pattern, *i.e.* the activity of the *famuli* covered by the accounting practice, seems to have been more frequently used during this period. Even at Hurdwick the *famuli* are recorded to have ‘helped’ in haymaking and in the harvest, and this is also true on many Winchester demesnes.

| Table 3.4 The composition of the harvest workforce on the Ormesby St Margaret demesne, Norfolk | | | | |
|---|-------------------------|---------------------|---------------------|---------------------|
| | 1423/4 ^a | 1424/5 ^c | 1440/1 ^b | 1451/2 ^a |
| Farm servants (men) | 14 ^d (39.6%) | 13 (38.6%) | 9 (55.4%) | 5 (37.5%) |
| Contracted workers (men) | 20 (56.5%) | 17 (50.4%) | 5 (30.8%) | 5 (37.5%) |
| Day-labourers (man-day) | 33 (3.9%) | 91 (11%) | 67 (13.8%) | 80 (25%) |
| Note: The contracted workers were the workers who worked for the whole season, as illustrated in Chapter 2. a. period of four weeks, one week is counted 6 days; b. period of five weeks, one week is counted 6 days; c. counted as the period of 4 weeks, one week is counted 6 days; d. including 2 personal servants of farm servants. Sources: TNA, SC 6/939/1, 2, SC 6/940/3, 10. | | | | |

Casual labourers could be marginalised in farming operations when the manorial demesne properly managed the other two types of labourer. The Merdon demesne, in

Chart 3.3d, employed a large number of labour services in all three operations during our period. It did not use casual labourers in threshing and in the harvest at all. The cost of the harvest, £2 10s 8d, was made for refreshments given to customary labourers that harvested 253 acres, which if done by casual labourers would cost the demesne £10 10s 10d, of 10d per acre.²⁵⁴ Weeding was done by customary labourers, too. The hire of mowers in haymaking was the only case when the demesne employed casual labourers in the main seasonal operations. This was the norm on the Merdon demesne until the end of the Winchester Pipe Rolls. This case is special in the way that even the threshing task was done by customary labourers, but, if we focus on the harvest, extensive use of labour services was hardly rare. On another Winchester demesne at Meon, Hants., in 1432, when 45 acres were harvested by casual labourers, 240 acres were harvested by labour services. Just one year before, the whole work was done by labour services.²⁵⁵ Apart from using labour services, the broad use of the *famuli* had the same effects and was conducted at Alciston and Lullington.

The four patterns demonstrate the participation of customary labourers and the *famuli* in seigniorial agriculture. On a few demesnes the activities of the *famuli* are not specified, like Hurdwick, but they clearly took part in the operations as a support labour force. Otherwise almost all sample demesnes employed more than just casual

²⁵⁴ Page, *The Pipe Roll*, pp. 375-377; HRO, 11M59/B1/156.

²⁵⁵ HRO, 11M59/B1/174, 175.

labourers. The result is that the cost of labour was considerably reduced. A few records reveal the difference before and after a change was made in the workforce. On the manorial demesne at Longbridge Deverill, when the majority of labour services were abandoned in 1451/2, the demesne spent £4 10s 7d on the harvest, a conspicuous contrast to 48s 10.5d eleven yearly earlier.²⁵⁶ At Ecchinswell, before 1441 no casual harvesters were hired; after 1441 the portion worked by labour services was reduced to 32 acres and the rest was done by casual labourers with a cost of around 55s every year.²⁵⁷ On Battle Abbey's home farm at Alciston, in the summer of 1441, when many *famuli* were unable to work, the demesne made a rare decision to hire casual labourers to do the harvest. The cost of labour rose to £7 14s 5d from 16s 10d in the previous year.²⁵⁸ This observation supports the assumption that the demesne manager would use customary labourers and the *famuli* to reduce the cost of agricultural work in the fifteenth century.

Another striking feature is that the manager appears to have purposely avoided hiring casual labourers in the harvest. The harvest boon (*precaria*) was still received on 21 of 77 manorial demesnes of the bishopric of Winchester in 1409/10.²⁵⁹ On the Glastonbury Abbey manorial demesne at Longbridge Deverill the harvest service was maintained until 1445. In Norfolk, on the Norwich Priory estate at Flegg, Taverham,

²⁵⁶ SHC, T\PH\lon/2/6/9832, 9836.

²⁵⁷ HRO, 11M59/B1/182, 184.

²⁵⁸ ESRO, SAS/G44/92-94.

²⁵⁹ HRO, 11M59/B1/156.

Martham, and Plumstead, a large number of harvest services were kept; and they disappeared only when cultivation ceased or the demesne was leased. At Plumstead, for example, in the summer of 1420, 462.5 services harvested 234 acres.²⁶⁰ The *famuli* were another reasonable solution. The same on the Plumstead demesne, like at Ormesby St Margaret, the *famuli* were involved in the harvest. In the summer of 1403, they were responsible for carrying the grain.²⁶¹ At Flegg in 1407, four *famuli* did reaping and carriage, and the other four did reaping and stacking sheaves in the barn.²⁶² Apart from Alciston, on the Battle Abbey estate at Lullington, Apuldram (Sussex) and Bromham, a similar pattern as Alciston was used, though a small number of casual harvesters were still hired. These two types of labourer were attached to the manorial demesne.

Moreover, a special type of harvest worker was employed on some demesnes, especially in Norfolk, to reduce the overall cost of labour. As illustrated in Table 3.4, 20 contracted harvesters were hired for four weeks in 1424 on the Ormesby St Margaret demesne, in contrast to the 33 man-days from ordinary casual labourers. In the following year, 17 contracted harvesters worked for four weeks with 91 man-days from casual labourers. The contracted workers were cheaper than casual labourers. The contracted mower received 9s that is equal to 4½d daily; but the casual mower

²⁶⁰ NRO, DCN 60/29/46.

²⁶¹ NRO, DCN 60/29/40.

²⁶² NRO, DN/EST 9/12.

worked by day received $6d$ daily. The best contracted reaper received $8s$, i.e. $4d$ daily, equal to the wage rate given to casual reapers; but the majority of contracted reapers received $3\frac{1}{2}d$ or $3\frac{3}{4}d$ as the daily average.²⁶³ At Flegg, two mowers were contracted for five weeks and three days in 1428, paid $6s\ 8d$ each.²⁶⁴ At Apuldram, in 1425, a reaper that was also a cart-follower, was hired for five weeks receiving $6s\ 8d$.²⁶⁵ At Lullington a person was hired for the same purpose since 1450/1.²⁶⁶ The employment of contracted labourers served as a way to reduce the reliance on casual labourers in the busiest season in the year.

So long as the employer managed rationally, it is reasonable to expect that he should try to reduce the cost of labour. Nevertheless, the employer's ability to manipulate the workforce might depend on the resources possessed by him or by the estate. First, customary labour was an inherited right. It was possessed by seigniorial landlords, regardless of the size and wealth of the demesne. The Merdon demesne, that had 253 acres under crops in 1409/10, was fairly large; and it employed a large number of labour services as illustrated above.²⁶⁷ The small manorial demesne at Werrington, which had around 35 acres under crops in c. 1480, had the right to employ customary labourers to reap up to 20 acres of oats.²⁶⁸ It was not up to the

²⁶³ TNA, SC 6/939/2.

²⁶⁴ NRO, DN/EST 9/19.

²⁶⁵ TNA, SC6/1017/22.

²⁶⁶ TNA, SC6/1027/3-12.

²⁶⁷ Page, *The Pipe Roll*, pp. 375-377; HRO, 11M59/B1/156.

²⁶⁸ DRO, D52/1 Werrington 1480/1.

employer to secure this labour force, though he would be willing to take advantage of it as long as available.

Secondly, employment of the *famuli* was not fully a managerial tactic applied by the employer. Farmer was right to indicate that usually *famuli* were a support labour force in the harvest.²⁶⁹ But, on a larger farm there was more ploughing work to do and more *famuli* were likely to be employed. For example, at Lullington, where 353.5 acres were sown in 145/6, nine yearly ploughmen were employed with ten others; and about three miles away at Lullington in the same year, 189 acres were under crops and five ploughmen were hired with ten others.²⁷⁰ And at Ormesby St Margaret, in 1430/1, 277.125 acres were taken care of by four ploughmen employed on a yearly basis, one work supervisor, and two unspecified full-time servants, with a bailiff and a cowherd; in 1451/2, when 191.75 acres were sown, three yearly ploughmen were working with a fix-termed harrower and a brewer.²⁷¹ When a large number of *famuli* were hired, it is unlikely that all of them were dedicated to support tasks, e.g. carriage. This is supported by the contrast between Alciston and Lullington where, at Alciston, casual harvesters were only used in a few years during the whole century and, at Lullington, a worker was regularly hired for the whole harvest season apparently to work with the *famuli*. At Ormesby St Margaret, in 1430/1 the *famuli* and servants

²⁶⁹ D. L. Farmer, 'The *famuli* in the later middle ages', in R. Britnell and J. Hatcher (eds.), *Progress and problems in medieval England* (Cambridge, 1996), pp. 212-213.

²⁷⁰ ESRO, SAS/G44/88; TNA, SC 6/1026/18.

²⁷¹ TNA, SC 6/939/8a, SC 6/940/10.

were working with a group of labourers in a mixed workforce, but in 1451/2 the *famuli* were specified as carters (*carectarij*). Generally speaking, on a large farm the permanent labour force was too large for support work and was able to take part in reaping; and on a small farm it was usually kept for carriage. The implication is that the large farm was more likely able to manipulate the workforce efficiently to minimise the cost of labour.

We may speculate that this mentality was also used in the non-seigniorial sector, and that the detailed arrangements might vary according to the resources the farm had. The gentry also employed *famuli*, or so-called servants of husbandry. Although not mentioned specifically in Youngs's and Poos's work, the possibility that the gentry used their servants in this operation in one task or the other is reasonable, because it would be irrational if the employer did not employ the servants in a busy period.²⁷² As for the peasant's holding, the household is his permanent labour force. It is well-known that women, children, and elderly, as long as being able-bodied, were all involved in the harvest. Although not all peasants had a large household, the peasant would not be hesitant to put all he had to the field.

From the discussion of how the harvest workforce was managed, we may further speculate that the preference of employing the salaried or the 'inherited' labour force to casual labourers might exist in other operations. The broad use of labour services

²⁷² Youngs, 'Servants and labourers', pp. 148-153, 157-158; Poos, *A rural society*, pp. 212-216.

and the *famuli* in mowing and weeding, in addition to the little expense spent on casual labour, may serve as evidence. Ploughing was mostly a responsibility of the *famuli*, and casual ploughmen were only hired on a few occasions, such as for sick leave of a permanent ploughman on Longbridge Deverill glebe.²⁷³ As for threshing, most of the work was finished by casual labourers on the manorial demesne. But the *famuli* were not excluded from the task. The implication is that they did it because some of them were not fully employed in ploughing during the sowing periods, which were also the period of threshing. It is similar on the peasant's holding, where the peasant was likely to thresh by himself, because the workload of ploughing the own holding was smaller than on a large farm. Thus, we may propose that casual labourers were more like a support labour force than a major one, because they were employed to cope with the demand which could not be satisfied by the employer's servants, labour services, or his own labour power. However, casual labourers were necessary to cope with seasonal surges in demand for labour.²⁷⁴

3.4 Conclusion

Chapter 3 discussed the possibility of an oversupplied labour market outside the harvest season. The stark contrast between the costs of labour in various operations

²⁷³ For example, on the Longbridge Deverill glebe in 1425/6, '*in secunda caruca domini fuganda ad ordeum per vj dies loco Johannis Fewer fogatoris iacentis infirmi*', see SHC, T\PH\lon/2/8/10614.

²⁷⁴ A full discussion of collaboration between the *famuli* and casual labourers is presented in Chapter 5.

provides support for the argument that the village labour supply was underemployed during most of the year as long as it was able to satisfy the demand in the harvest. First, no matter how the demesne manager managed to reduce the cost with other types of labourer, it did not change the fact that the farms without sufficient resources had to rely on casual labourers. Secondly, it may be argued that the pattern on the manorial demesne is unlikely to apply to non-seigniorial estates. But non-seigniorial estates had the same operations, too. It was the sown acreage, natural environment and some human efforts that determined the workload, not the type of estate. Thirdly, is not the distribution of the cost in Chart 3.3 a result of different wage rates? By converting the work into man-days, we get 166 man-days for threshing 252qrs 4bu of various grains and about 454 man-days for the harvest at Pittington in 1412/3, proving that the seasonal variation in demands was genuine.²⁷⁵ Lastly, it may be argued that the harvest operation included women and children who were not usually employed in the operations like threshing. Indeed, threshing requires the use of thresh-flails and woman threshers have not been found in the source material. But the threshing operation was allowed a long period. The average monthly workload was rather low as illustrated in Chart 3.3. It is unlikely that it demanded intense labour input from

²⁷⁵ The conversion ratio of the threshing labour input uses G. Clark's estimates that in the first half of the fifteenth century in one day the labourer could thresh 7.3bu of wheat in average. He has also suggested that 'in the time taken to thresh a bushel of wheat, roughly 1.75 bushels of barley could be threshed and 2.25 bushels of oats'. See, Clark, 'Productivity growth', p. 426; G. Clark, 'The long march of history: farm wages, population, and economic growth, England 1209-1869', *Economic History Review*, 2nd ser., 60 (2007), p. 112. The conversion of the harvest labour input uses the ratios suggested in *Anonymous Husbandry* indicating 'five men can well reap and bind two acres a day of each kind of corn, more or less'; see, E. Lamond (trans. and ed.), *Husbandry. Together with an anonymous Husbandry, Seneschauscie and Robert Grosseteste's Rules* (London, 1890), p. 69.

male labourers. We may conclude that the casual labour market in most of the year was oversupplied.

The above analysis has also shed the light on the pattern of employment. Clearly, outside the harvest many villagers could not find hire in agriculture in the rest of the year. This understanding should be applicable to the management on the gentry's farm and the large peasant farm that relied on paid labour. As Porter's Hall in Stebbing, Essex, two-thirds of casual labour input was used in the harvest and in the rest of the year the demand was small.²⁷⁶ A variation might be found on the ordinary peasant's holding, where the peasant used his own family to satisfy the demand and only hired in the busiest season. That is, only a small number of landless villagers could live upon casual hire in agriculture, whilst most casual labourers had other sources of income. The labourer's other undertakings might negate the influence of oversupply on the labour market.

Apart from the uneven labour market, the traditional use of casual wage evidence has marginalised the economic role of the *famuli* and customary labourers in casual operations. The discussion has demonstrated that the two types of labourer were actually effective factors that reduced the cost of labour. However, the use of labour services is supposed to have been rather limited in the fifteenth century; and its importance was reducing in accordance with the shrinking seigniorial sector. How

²⁷⁶ Poos, *A rural society*, p. 216.

extensively were labour services used? Did their abandonment promote the reliance on casual labourers? In addition, the *famuli* had their own designated responsibilities. They were only available when those responsibilities did not need them, periodically. To what extent could they take on casual tasks? It is recognised that on some demesnes they were rather active, like the *famuli* at Alciston. In what situation were they allowed to do that much casual work? When the release of labour services finished, casual labourers and the *famuli* formed a dualistic system of agricultural labour. How the *famuli* were employed in different operations is an essential question of the operation of the said system.

Chapter 4 The influence of labour services on fifteenth-century agricultural wage labour.

Agricultural wage labour had a long history before it came to dominate in seigniorial agriculture as a direct result of the abandonment of labour services that provided the landlord with a cheap and stable labour supply. In the beginning of the fifteenth century, labour services were still important on a good number of manorial demesnes; as time went by, they were mostly abandoned with a small part remaining to the next century. It has been suggested in existing studies that the abandonment was a cause of the fall of demesne farming, because it forced the manorial demesne to confront the high wage rates in the late middle ages. This understanding, however, relies on two fundamental assumptions that have not found proper support. Firstly, the release of labour services generated considerable difficulty to the labour supply on the manorial demesne; and, the prices of paid labour were so high that the demesne could not bear the replacement cost and declined. Revisiting these two assumptions shall answer the question of the financial impact when customary labourers were replaced by paid labourers.

From the economic aspect, the medieval labour services were a part of rent that was performed by serving on the demesne farm in farming operations.²⁷⁷ Because the

²⁷⁷ P. Vinogradoff, *Villainage in England: essays in English mediaeval history* (Oxford, 1892), pp. 278-312; M. M. Postan, 'Medieval agrarian society in its prime: England', in M. M. Postan (ed.), *Cambridge economic history of Europe*, 1 (Cambridge, 1966), pp. 607-609.

tenants were demanded to work, they were a solution to the post-Black Death labour shortage. Because customary labour was usually cheaper than paid labour, it was a means to counter the high wage rate during the same period.²⁷⁸ From the social aspect, labour service is thought to have been 'one of the most resented and irksome aspects of serfdom' that the tenant wanted to get rid of as soon as possible.²⁷⁹ During a period of depopulation, the shortage of capable peasants to take on tenancy improved their bargaining power in negotiation and allowed peasants to deny burdensome requests. The result of the clash between the lord's economic interest and the peasant's self-concern was in the peasant's favour. In addition, during the same period mass leasing of manorial demesnes happened. In theory, the fall of demesne farming was caused by the financial burden increased by the abandonment of labour services.²⁸⁰ The theory is reasonable by all means. The casual labour wage rate increased approximately 150% between 1350 and 1445 according to parliamentary legislation and wage statistics.²⁸¹ The salary paid to the *famuli* increased nearly 200% between 1388 and 1445.²⁸² When labour services were removed from the manorial demesne, the demesne had to deal with these high wage rates directly.

²⁷⁸ B. F. Harvey, *Westminster abbey and its estates in the middle ages* (Oxford, 1977), p. 260. D. Stone, 'The productivity of hired and customary labour: evidence from Wisbech Barton in the fourteenth century', *Economic History Review*, 2nd ser., 50 (1997), p. 641.

²⁷⁹ B. M. S. Campbell, 'A unique estate and a unique source: the Winchester Pipe Rolls in perspective', in R. H. Britnell, (ed.), *The Winchester pipe rolls and medieval English society* (Woodbridge, 2003), pp. 25-27.

²⁸⁰ E. A. Kosminsky, 'The evolution of feudal rent in England from the 11th to the 15th centuries', *Past and Present*, 7 (1955), pp. 12, 29; A. R. Bridbury, 'The Black Death', *Economic History Review*, 2nd ser., 26 (1973), pp. 583-584.

²⁸¹ D. L. Farmer, 'Prices and wages, 1350-1500', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 516-519.

²⁸² *Statute of the Realm*, 2, pp. 57, 338.

However, the problem remains. The wage was the money paid to the worker who was hired to cope with the demand for labour; and the worker was only hired when the demand existed. There are several observations, which cast doubt over the significance of the vacancies generated by abandoned labour services. First, regarding the hire of casual labourers, it has been shown in Chapter 3 that the agricultural labour market was uneven during the year and that only in August was there significant demand for labour. It is doubtful how much burden was generated during a limited period in the year. Secondly, as for the employment of permanent workers, *i.e.* the *famuli*, existing studies have illustrated that they had already become paid workers in the fourteenth century and that since then they had taken over most continuous responsibilities from customary labourers.²⁸³ Lastly, on several manorial demesnes labour services persisted at a good level well into the sixteenth century, implying that the changes were limited.²⁸⁴ There seems to be misjudgement in the existing studies of late medieval labour services. These observations direct us to be suspicious of how much demand for paid labour was created during this change.

The purpose of this chapter is to approach this controversy by reconstructing the employment of labour services on the fifteenth-century manorial demesnes and assess

²⁸³ M. M. Postan, *The famulus: the estate labourer in the 12th and 13th centuries*, *Economic History Review Supplements* 2 (1954), pp. 16-17, 31; D. L. Farmer, 'The *famuli* in the later middle Ages', in R. Britnell and J. Hatcher (eds.), *Progress and problems in medieval England* (Cambridge, 1996), pp. 211-214.

²⁸⁴ M. Mate, 'Tenant farming and tenant farmers: Kent and Sussex', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 682-683; E. Miller, 'Tenant farming and tenant farmers: the Southern Counties', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), p. 708; P. D. A. Harvey, 'Tenant farming and farmers: the Home Counties', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 667-668.

the financial impact of this pattern. In existing studies, despite the understanding of the fall of labour services, two fundamental points remain most unknown. First, to what extent were labour services used on the manorial demesne in comparison with the other types of labourer? This point is essential for understanding the pattern of employment of labour services before examining the impact of its removal. The first section is dedicated to the discussion of this point. Secondly, the pattern of how labour services were abandoned is uncertain in the existing studies, but it is an essential point for understanding how the financial burden was added on to the manorial demesne. The examination constitutes the second section of this chapter. The conclusions of these two shall form the basis for analysing the financial impact in the third section.

The record of employing labour services is preserved in manorial accounts. In the beginning of this period, more than 30 demesnes were still employing customary labourers in agriculture; and in the middle of this century the number of the demesne reduced to less than five; by 1500 only one manorial demesne in my sample kept labour services. This source material allows me to compare the use of labour services between different periods and it permits an analysis of the financial impact when it was released on the sample demesnes. Moreover, the series of Longbridge Deverill accounts that includes 57 rolls between 1420 and 1490 provides exceptional details of employing customary labourers, including the release of them from this duty. Using

this series of account rolls a case study of this demesne forms the core of the first section.²⁸⁵

4.1 The formation of customary labour in fifteenth century seigniorial agriculture

The use of labour services is a regular entry in manorial accounts, because they were an asset whose discharge had to be accounted for and because the accountant had to explain the related cost of refreshments given to these labourers. The information varies in different accounts, but in general quantitative records can be assembled. In several series of manorial accounts, a separate section of labour services provides even more details.²⁸⁶ This source material allows us to examine this matter from two aspects. Firstly, how consistent were labour services used in seigniorial agriculture; secondly how persistent were they used over the fifteenth century? To summarise the employment of the fifteenth-century customary labourers, I intend to present a case study of Longbridge Deverill manorial demesne to illustrate the general features.

The series of Longbridge Deverill manorial accounts provides special details of employing customary labourers. Between 1420 and *c.* 1480, this manorial demesne cultivated 60-100 acres of land, relatively smaller than the ordinary demesne farm in

²⁸⁵ Somerset Heritage Centre (hereafter SHC), T\PH\lon/2/6/9815-6, 9818-21, 9823-6, 9829, 9830-3, 9835-41, 9869-70, 9872, 9874-7, 10613, 10615, 10708-9; T\PH\lon/2/7/9940-2, 9944-62, 9964.

²⁸⁶ For the detail of the record of labour services, please see Chapter 2.

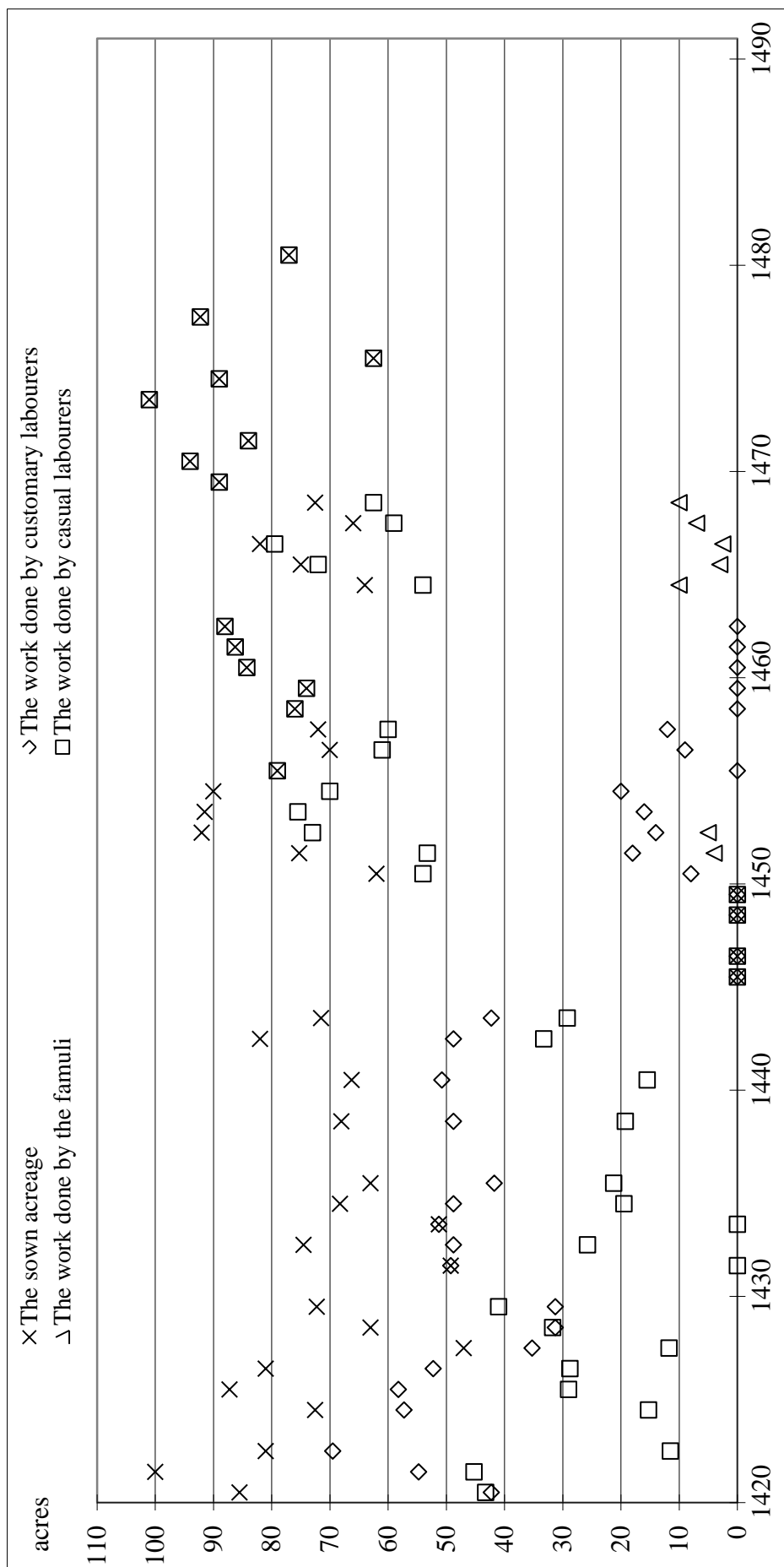
this century. On this demesne threshing was commonly worked by casual labourers. Casual labourers also did the majority of haymaking. In the harvest, casual labourers, the *famuli* and customary labourers all took part in it; and customary labourers were responsible for the majority until 1446. In detail, three types of services were used in the harvest. A harvest boon work (*precaria*) was performed. Villagers who did so were treated with a meal (*ad cibum*), but their number was different every year, implying that this was not a strict obligation. Secondly, two customary tenants were bound to reap 20 acres of crops doing ‘opus’ (*per opera custumariorum*). Thirdly, certain individuals appeared regularly in the harvest, reaping a fixed acreage of crops. From each acre they ‘sold’ two sheaves to the demesne for one penny per sheaf. The low price of grain and the regularity of the task suggest that this was a special type of labour service. This responsibility is called *pro garba*. The removal of this substantial workforce should represent a great burden on this demesne.

To simplify the complexity of work distribution, the composition of the harvest workforce and the amount of work done by different types of customary labourer are drawn into Chart 4.1 and 4.2. In Chart 4.1, the three types of customary labourer are merged into one to present the overall importance of labour services in comparison with paid labourers. Some change happened in 1445/6 when the demesne ceased cultivation. In 1450/1 when grain cultivation restarted, the majority of labour services

disappeared permanently. Chart 4.2 shows that the *pro garba* group and the *opus* group were regularly employed until 1445/6, when they were both released. The harvest boon was the only one that was maintained after 1450, remaining at a fairly high level until the latter 1450s. It seems that customary labourers did a considerable amount of work up to harvesting 50 acres. This considerable work was done by a few persons, whose identities indicate how the duty was performed.

Chart 4.1 suggests that labour services were rather important in the first half of this century. In the *pro garba* group, in 1420/1, Simon Panell and Alicia Suell Senior had to harvest six acres each, together with Simon White who was bound to reap three acres. They produced 30 sheaves of grain altogether and sold them to the manorial demesne for 1*d* each as stated above. John Mascall (1½ acres), John Gibbes (1½ acres), John King (1½ acres), and Alice Suell Junior (3 roods) worked similarly. This *pro garba* group accounted for reaping 20¼ acres of crops altogether. Another 22 acres were done by the *opus* group that included John Panell and Thomas Spray of Crokerton, of whom each should reap 9 acres, and 18 acres altogether. There were two other persons, John White and John Smith, encumbered with reaping about four acres in this group. The formation of the harvest boon work is unknown, since it was inconvenient for the accountant to identify individuals who did not work on a regular basis. Its contribution varied by the year as illustrated in Chart 4.2. In summary, in

Chart 4.1 The distribution of the harvest labour on the Longbridge Deverill demesne, Wiltshire, 1420-1480



Sources: SHC, T\PH\lon/2/6/9815-6, 9818-21, 9823-6, 9829, 9830-3, 9835-41, 9869-70, 9872, 9874-7, 10613, 10615, 10708-9; T\PH\lon/2/7/9940-2, 9944-62, 9964.

1420/1, approximately a half of harvest work was done by customary labourers whilst the other half was done by casual labourers.²⁸⁷ Thereafter a falling trend is observed.

Chart 4.2 illustrates that the employment of the *pro garba* and the *opus* groups was relatively steady because of the fact that the duty was attached to the tenement. The amount of their work changed in three cases. First, when the tenant entered into lesser officialdom, his responsibility became his allowance. For example, in 1421/2, John White, who was responsible for reaping four acres, was recorded as responsible for the same, but the reaped grain was not counted in the demesne receipt because White was the woodward and the change was made ‘for his post of the woodward’ (*pro officio wodewardi*).²⁸⁸ Between 1426 and 1428, Simon White was the reeve and his duty of harvesting three acres was made an allowance for the same reason; John King’s successor William was the reeve in 1443/4 and was given a similar allowance. It is hard to tell from the record if the grain was actually harvested and given to them; but it is clear that those lesser officials’ labour services were removed for a period. This arrangement explains the fluctuation in the *pro garba* group in Chart 4.2.

Secondly, the abandonment happened individually when the tenant was released from the labour service. During our period there were only two cases. John Panell was released from the *opus* group in 1428, whilst Thomas Spray remained. The change

²⁸⁷ SHC, T\PH\lon/2/6/9815, 9816, 9818.

²⁸⁸ ‘...et per opera ij customariorum xvj acras et non plus quia iv acre allogate Johanni White Wodeward’; SHC, T\PH\lon/2/6/9816, 9818.

happened when a newcomer William Smyle took on the holding. Smyle was released from Panell's responsibility of harvesting 9 acres and the arrangement was struck 'for the agreed use for himself' (*ad contractum usum pro eidem*).²⁸⁹ This arrangement accounts for the reduction in the *opus* group in Chart 4.2. The other withdrawal happened in mowing in 1455/6, when one or two services (*opera*) of mowing ten acres of meadows were revoked.²⁹⁰

The collective withdrawal took place in 1445/6 when all the harvest services but boon-work were released. Since 1420, these tenants were still there in 1445 with the same responsibilities, except John Panell and except the replacement with successors. By 1445 Jacob Ambrose had worked on behalf of Suell the senior and John King was replaced by William King. In 1445/6, a certain decision was made to cease cultivation on this demesne. It seems that Glastonbury Abbey was not keen to maintain grain production in this area, because it had also stopped cultivating the Monkton Deverill demesne in c. 1428 that was three miles away. The *pro garba* and the *opus* groups were released (*liquiditi*) by agreement (*ad contractum*) without visible compensation to the lord.²⁹¹ As can be seen in Chart 4.2, there is a trough between 1445 and 1450. In 1450/1, when grain production restarted, the tenants did not return to the service.

²⁸⁹ '...sic ix acras quas Willielmus Smyle loco Johannis Panell metere solebat allogatas eidem quia ad contractum usum pro eidem hoc anno', SHC, T\PH\lon/2/6/9874.

²⁹⁰ SHC, T\PH\lon/2/6/9840.

²⁹¹ '... nichil eo quod non operabantur et sunt ad contractum pro eorum operis ut supra liquidita et cetera', SHC, T\PH\lon/2/6/9876.

The villagers were, however, generously helping with the harvest boon that lasted for around eight years; and it was eventually withdrawn for unknown reasons. Since then, the manorial demesne significantly increased its use of paid labourers.

The Longbridge Deverill case illustrates that there were roughly two types of labour service. First, the day-work (*opus*), which had been an important type in the high middle ages, was still used on several manorial demesnes in this century. Two variations were used at Longbridge Deverill. On the one hand, encumbered tenants had to harvest a certain number of acres; on the other, the encumbered tenants had to prepare two sheaves of corn each acre from a certain number of acres and the sheaves were sold to the lord at a low price. Both variations were attached to the tenancy; and in this case the service was only changed when the holding was transferred. It could be commuted or released. In the Longbridge Deverill account roll there is a list of commuted services; but between 1440 and 1450 there is only one change, *i.e.* Richard Stephens. Thus, the persons mentioned above were all released in 1445/6.

The other type is the boon-work (*precaria*), which was more common than the day-work during this period. The boon-work is thought to be provided 'out of affection for the lord' and in return the lord should compensate the villagers who came.²⁹² In this sense, the labour input of the boon should not be consistent. The Longbridge Deverill pattern is a good example, where the amount of work done by

²⁹² Vinogradoff, *Villainage in England*, pp.174-175.

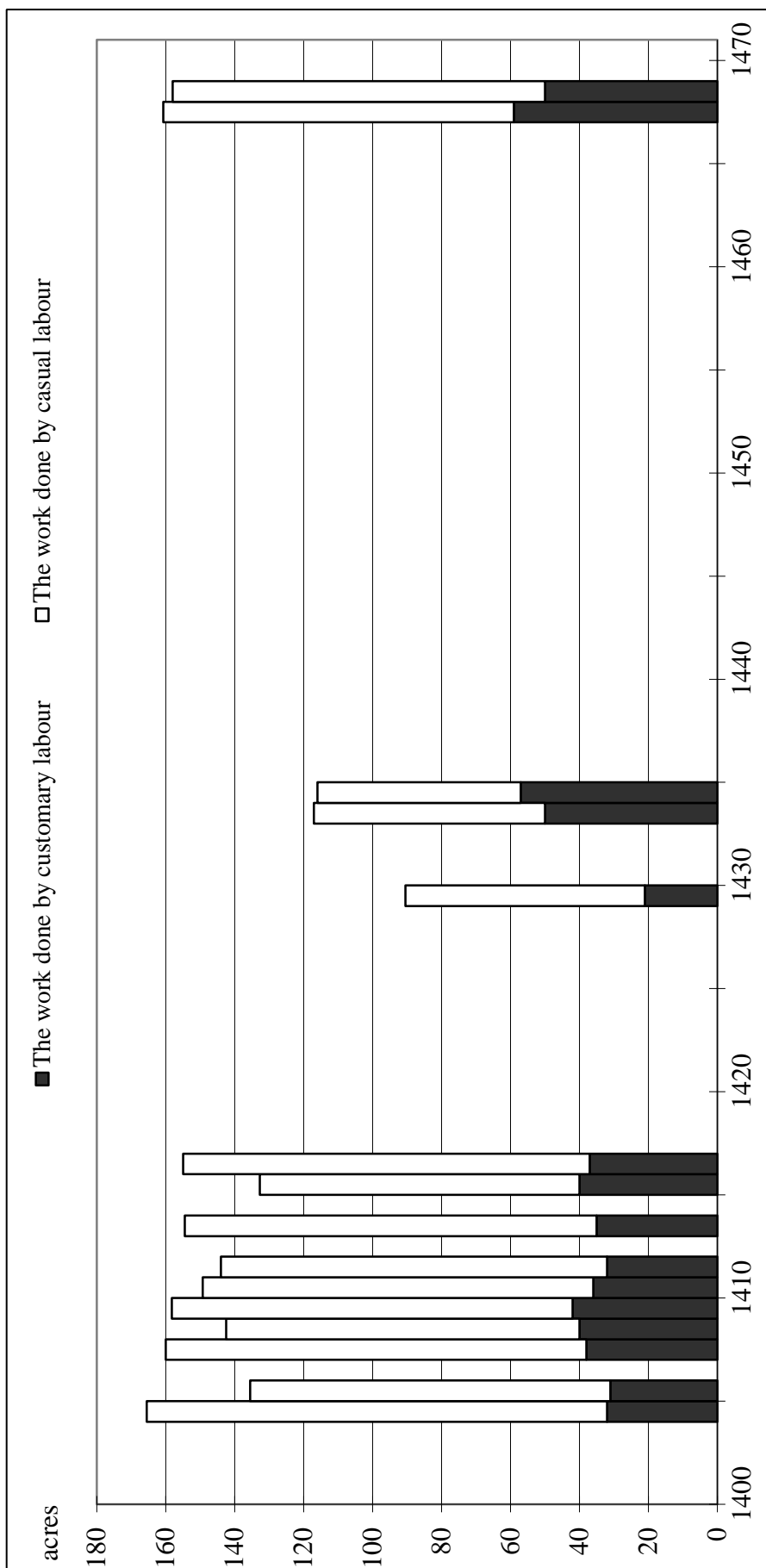
the villagers varied and the manager rewarded them in the *precaria ad cibum*.²⁹³ At Acton (Suffolk), a number of villagers came to help shear sheep and work in the harvest ‘for love’ (*pro amore*); the number of the villagers and the amount of work always varied. Or at a certain time in the year, the *famuli* were sent out to help in their *Lovynghdays*.²⁹⁴ Moreover, due to the cost of refreshments, *i.e.* food and drinks, the manager had to record this activity, sometimes with great detail. At Woolstone (Berks.), the boon work was persistently received by the manorial demesne as far as the record goes, as shown in Chart 4.3. At Woolstone, the harvest boon accounted for 21 acres in 1430 to 59 acres in 1468; whilst the total harvest acreage varied between 90.5 and 165.5 acres. To reward the villagers, the demesne gave herrings, whose cost forms the body of this record.²⁹⁵ The fluctuation in Chart 4.3 resembles the fluctuation in the group of boon-work in Chart 4.2. These two cases illustrate how the boon-work was used during the fifteenth century.

²⁹³ SHC, T\PH\lon/2/6/9816.

²⁹⁴ The National Archives (hereafter TNA), SC 6/989/13, 16.

²⁹⁵ TNA, SC 6/757/21-SC 6/758/19.

Chart 4.3 The distribution of the harvest labour on the Woolstone demesne, Berkshire, 1400-1470



Source: TNA, SC6/757/21-758/19.

However, there was a puzzling pattern used on the demesnes of the bishopric of Winchester. It is called boon-work (*ad precaria*) in the record and the tenants were rewarded, but frequently the boon-work accounts for a considerable and fixed amount of work. On the Overton demesne (Hants.), there were always 69 men, who did two harvest boons between 1406 and 1427; thereafter around 22 men regularly came to do one harvest boon. On the Ebbesbourne demesne (Wilts.) three harvest boon-works were regularly employed before 1441/2 to harvest 33 acres; and thereafter two boon-works were regularly used to harvest 22 acres until the end of the record. It is intriguing that the fluctuation in the amount of work was only one acre. And there was also a pattern in the meals given to villagers. The values of foodstuffs were fixed. $\frac{1}{4}d$ was the fixed value of cheese given to each villager, $\frac{1}{2}d$ was the value of bread, $\frac{1}{2}d$ of beer, and $\frac{1}{2}d$ of meat. At Ecchinswell and Overton villagers received herrings.²⁹⁶ Presumably this was a type of day-work, but the encumbered tenants were rewarded as in the boon-work. It seems reasonable to sort this type into the day-work because of the consistent use of it.

Apart from being consistent, the employment of labour service was persistent at Longbridge Deverill. There were roughly three periods that indicate different patterns of employment. The extensive use in the harvest before 1445/6 should demonstrate that, even in the concluding phase of medieval customary labour, labour services were

²⁹⁶ Hampshire Record Office (hereafter HRO), 11M59/B1/150-191.

still important in seigniorial agriculture. In the second stage in the 1450s, although the majority of labour services were released, the contribution of the harvest boon-work to the demesne was still visible. Thenceforth until 1481, a small number of customary labourers were used in weeding and mowing. The three periods exemplify how the abandonment of labour services might happen. That is, the main body of the service was given up first; the boon-work lasted longer; and a few tenants were still willing to take on labour services in the late century.

In England, regardless of the number of customary labourers actually employed, labour services persisted through the fifteenth century and well into the early sixteenth century. During this period, in the Southeast, lordship was strong enough to demand tenants to do carriage and attend to sheep on the estates that belonged to either lay or ecclesiastic magnates. In the Home Counties, labour service remained on the manorial demesne at Souldrop (Beds.) as late as 1530, at Sandhurst (Berks.) in 1498, Essendon (Herts.) in 1468, and Cowley (Middx.) in 1512.²⁹⁷ In Cornwall, the Tavistock Abbey demesne at Werrington owned the service from its tenants to take on carriage and to work in the harvest as late as 1489/90.²⁹⁸

On most manorial demesnes, labour services did not last for the whole century, but it persisted long enough to be noteworthy. The Woolstone demesne, said to have

²⁹⁷ Mate, 'Kent and Sussex', pp. 682-683; Miller, 'The Southern Counties', p. 708; Harvey, 'Home Counties', pp. 667-668.

²⁹⁸ Devon Record Office (hereafter DRO), D52/1 1489/90.

belonged to the bishops of Winchester, used a considerable number of services as late as 1468/9.²⁹⁹ On other Winchester estates, after 1440, at least six manorial demesnes still extensively employed them.³⁰⁰ Norwich Priory ceased cultivation on its manorial demesnes early, but its reliance on labour services was fairly heavy before leasing. On the four manorial demesnes, Plumstead, Flegg, Martham, and Taverham, labour service was performed in the harvest until *c.* 1420, except Flegg, where customary labourers were used as late as *c.* 1430/1.³⁰¹ Battle Abbey had released most labour service on its Sussex demesnes in the late fourteenth century, but a few customary tenants were still weeding at Alciston during the first three decades of the fifteenth century.³⁰² On its Wiltshire estate at Bromham, labour service lasted slightly longer to 1439/40.³⁰³ Durham Priory did not have customary tenants during this period for the Elvethall demesne, but frequently the tenants from Shincliffe came to help plough from around 1453.³⁰⁴ In 1442/3 on the Hewell demesne (Worcs.), a sheep was bought for customary mowers in haymaking.³⁰⁵ On the Acton demesne, tenants came to help in various farming activities in no clear pattern.³⁰⁶ More or less, manorial demesnes

²⁹⁹ TNA, SC6/758/19.

³⁰⁰ HRO, 11M59/B1/150-191.

³⁰¹ Norfolk Record Office (hereafter NRO), DCN 60/29/40-46; NRO, DN/EST 9/12-21; NRO, NRS/20D2/5905-5916; NRO, DCN 60/35/43-53. As for the labour service performed in 1430/1, see NRO, DN/EST 9/20. There is one more Flegg roll, *i.e.* NRO, DN/EST 9/21, preserves the record of customary labourers employed in the harvest, but that roll is undated.

³⁰² TNA, SC 6/1025/5.

³⁰³ TNA, SC 6/1046/12-1047/20.

³⁰⁴ Dean and Chapter of Durham Muniments (hereafter DCDM), Elvethall Account Roll (hereafter EAR) 1453/4-1491/2.

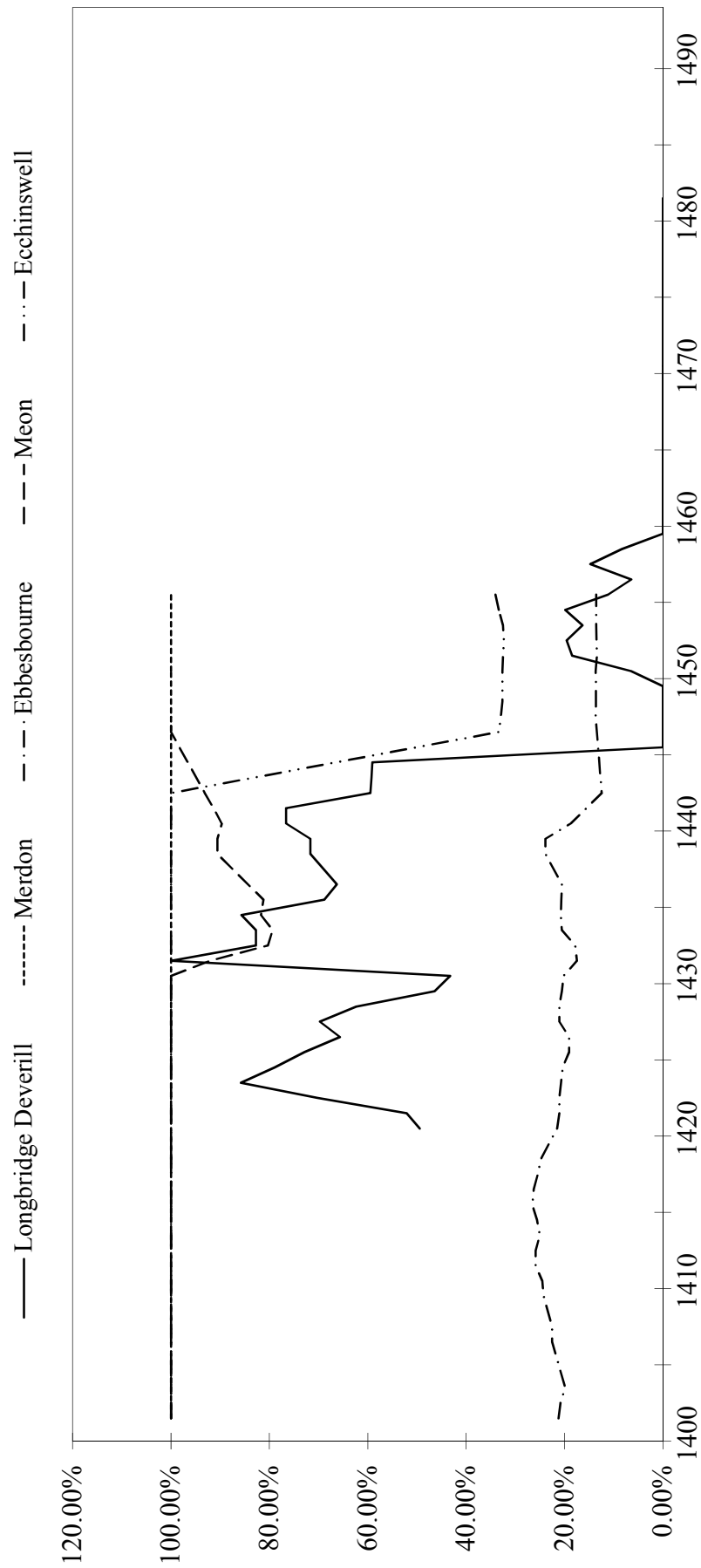
³⁰⁵ TNA, SC 6/1068/16.

³⁰⁶ TNA, SC 6/989/16.

used customary labourers over this century.

The consistency and the persistency of labour services urge us to reconsider its importance over this century. Chart 4.4 is produced to demonstrate that even in the final phase of the medieval customary labour, labour services were still maintained at considerable strength for an extended period. The Chart illustrates that the Merdon demesne (Hants.) finished all its harvest work by using customary labourers; Meon (Hants.) did the same until 1431 and before it ceased cultivation in 1447 the demesne was able to regain its command of customary labourers. On another Winchester estate at Ebbesbourne, the employment was relatively small, but persisted consistently to 1454/5 when the record ends. Comparatively, the Longbridge Deverill case represents the group employing substantial labour services. Chart 4.4, similarly, represents the cases that extensively employed customary labour on a small group of manorial demesnes. Only on this group of demesnes is there a chance to examine the impact of the relinquishment of labour services. The Chart reveals that considerable changes indeed happened, as at Longbridge Deverill and at Ecchinswell, among the cases of smaller changes and, even, no change.

Chart 4.4 The importance of labour service in comparison with casual labourers in the harvest on selected manorial demesnes during the fifteenth century.



Sources: SHC, T\PH\lon/2/6/9815-6, 9818-21, 9823-6, 9829, 9830-3, 9835-41, 9869-70, 9872, 9874-7, 10613, 10615, 10708-9; T\PH\lon/2/7/9940-2, 9944-62, 9964; HRO, 11M59/B1/156-191.

4.2 The significance of customary labour in fifteenth-century demesne farming

It would, however, be inappropriate to assume that the use of labour services in this century was as extensive as it had been in the twelfth century. The accepted idea is that customary labourers were used to take on a wide range of farming tasks in the high middle ages, but their importance was reducing since then. By the middle of the fourteenth century a large number of labour services had already disappeared.³⁰⁷ A temporary recovery was observed in the aftermath of the Black Death, but shortly after the falling trend was continued or accelerated by post-Black Death depopulation. In c. 1400 on many manorial demesnes, customary labourers were totally released.³⁰⁸ The importance of labour services should have much reduced by quality and quantity before the start of the fifteenth century. In this context, a logical question is how much labour services could still be employed during our period. This question is examined using two types of source material, as will be illustrated below; and with the source material the comparative importance of labour services in seasonal operations can be examined.

There are two types of useful source material. One is the separate account of labour services, which is available from most Norfolk demesnes, but the Werrington

³⁰⁷ H. L. Gray, 'The commutation of villein services in England before the Black Death', *English Historical Review*, 29 (1914), pp. 625-656; J. Hatcher, 'English serfdom and villeinage: towards a reassessment', *Past & Present*, 90 (1981), 10-12.

³⁰⁸ Harvey, *Westminster Abbey*, pp. 256-261; C. Dyer, *Lords and peasants in a changing society* (Cambridge, 1980), pp. 120-121.

accounts from Cornwall provide most consistent details. The other is found in the cost of labour that includes the cost of refreshments provided to customary labourers. This type of record does not provide details, but it gives quality quantitative data, like the amount of work, for analysis.

The Werrington demesne was small, but it owned a good amount of customary labour. During this century, it cultivated less than 50 acres every year. For cultivating this small farm the manorial demesne was able to command persistently a customary labour force as outlined in Table 4.1. The labour service included 180 services (*opera*) of ploughing and 115 *opera* of each of the other tasks. The amounts were settled as early as 1385/6. Each ploughing service had to plough one day; and each harrowing service had to harrow two acres. Each mowing service was required to mow a half acre and 16 perches of meadows. Each service of reaping oats had to finish two acres. The service of carriage with the cart demanded one work-day during the harvest; and the carriage service with the horse required three carrying duties in the neighbourhood of Tavistock. There was a troublesome service called outside carriage (*Cariagia extra*) requiring the tenant to carry things in Devon and Cornwall. It was the most expensive service with a commutation value of 4*d*; but it was completely exempted, released, or commuted by 1400. Although the amounts illustrated in the Table seem small, at the beginning of this century the services were responsible for a good part of agricultural

work on this small demesne farm.

| Table 4.1 Labour services on the Werrington demesne, Cornwall | | | | | | | |
|---|--------------------|--------------------|-----------------|------------------------------|-------------------------------|-----------------------|-----------------|
| | Ploughing (180) | Harrowing (115) | Mowing (115) | Carriage with carts (115) | Carriage with horses (115) | Reaping oats (115) | Sown acreage |
| 1397 | 21 | 26 | 12 | 12 | 104 | - | 52.75 |
| 1412 | 19 | 31 | 15 | 12 | 83 | 13 | 53.5 |
| 1451 | 31 | 29 | 22 | 6 | 53 | 16 | 51 |
| 1453 | 23 | 27 | 29 | 6 | 40 | 12 | 47.25 |
| 1458 | 14 | 27 | 19 | 6 | 42 | 11 | 42 |
| 1469 | 27 | 27 | 20 | 0 | 53 | 14 | 45 |
| 1470 | 24 | 25 | 19 | 0 | 36 | 13.5 | 42.25 |
| 1476 | 18 | 17 | 15 | 1 | 31 | 10 | 34 |
| 1480 | 26 | 14 | 13 | 0 | 32 | 10 | 36 |
| 1485 | 25 | 11.5 | 8 | 0 | 20 | 7.5 | 32 |
| 1488 | 0 | 12 | 8 | 0 | 21 | 8.5 | 27.25 |
| 1489 | 0 | 10 | 5 | 0 | 22 | 5 | 30.25 |
| Note: unit: service (<i>opus</i>). | | | | | | | |
| Source: DRO, D52/1 Werrington 1397/8-1489/90. | | | | | | | |

These data allow a detailed comparison between the customary labour input and the paid labour input. In 1412/3, 49.06% of the harvest work was finished by labour services. The harrowing task on a few acres of the fallow was done by them, too. In the same year, customary labourers mowed nine acres of the meadow, whilst no casual labourer was employed for that task. Approximately, only 11.84% of the ploughing task was worked by the service. The rest must have been the responsibility of the *famuli*, who operated one plough-team. It is difficult to tell the importance of carriage services. Certainly they were useful because the demesne did not have its

own carter though having a two-wheeled wagon (*plaustrum*).³⁰⁹ The result shows that the Werrington demesne had little reliance on casual labourers, *i.e.* mostly in the harvest to harvest 25 acres, a few in weeding, a few in sheep-shearing, one in ditching, one in gardening and some in maintenance of buildings in 1412/3.³¹⁰ The employment of casual labour was insignificant on this small farm.

This case demonstrates the comparative importance of customary labourers over the fifteenth century on a certain demesne. It illustrates that this demesne commanded a cheap labour force, *i.e.* 2d for reaping an acre of oats, to finish up to a half of the reaping task. It also explains that the service was not fully performed, which was to the lord's disadvantage. For example, in 1453/4, twelve customary labourers reaped only 12 acres of oats when they should reap 24 acres; in 1458/9, eleven customary labourers did only 17 acres of the 22 acres.³¹¹ Over time, the importance of labour services was falling in general, in terms of both the due amount of services and the performance of them.

As for the other type of source material, usually, when the demesne used labour services, the record was preserved in the cost of seasonal operations for the cost of refreshments. In the Longbridge Deverill case, it is indicated that customary labourers

³⁰⁹ B. M. S. Campbell, J. A. Galloway, D. Keene and M. Murphy, *A medieval capital and its grain supply: agrarian production and distribution in the London region c. 1300*, *Historical Geography Research Series* 30 (London, 1993), p. 58.

³¹⁰ DRO, D52/1 Werrington 1412/3.

³¹¹ DRO, D52/1 Werrington 1453/4, 1458/9.

were employed in ploughing, weeding, mowing and the harvest. In ploughing, one ploughing boon was received to plough three acres on the barley field and seven acres on the dredge field with the lord's plough in 1425/6.³¹² In 1421/2 when 23.5 acres of meadow were mown by casual labourers, 1.5 acres were finished by customary labourers; and in haymaking on a field of 22 acres, 3.5 acres were done by service. In the same year, 54.75 acres of various grains were harvested by customary labourers, when 45.25 acres were worked by casual harvesters. On top of these, there was an uncertain amount of weeding service. These services would be worth around 9*d* in mowing the meadow, 14*d* in haymaking, and 45*s* 7½*d* in the harvest, if they were finished by casual labourers.³¹³ The amount of the ploughing boon was uncertain, but it was worth 2*d* for ploughing each acre according to the record of the glebe in the same village.³¹⁴ Although the result is not as detailed as the Werrington case, this approach is able to demonstrate the financial contrast between employing customary labourers and casual labourers. It serves the purpose of examining the influence of the abandonment of labour services, by comparing the cost of labour in various seasonal operations.

These two types of record allow a comparison between casual labour and labour service to be conducted upon the three seasonal operations of the harvest, threshing

³¹² SHC, T\PH\lon/2/6/9818.

³¹³ The wage rates are given in the source material. They are 6*d* for mowing each acre of meadow, 4*d* for doing haymaking for each acre, and 10*d* for harvesting each acre of grain; see, SHC, T\PH\lon/2/6/9816.

³¹⁴ SHC, T\PH\lon/2/8/9610.

and mowing and weeding; a few cases provide the information of ploughing services.

The source material illustrates that, like the Longbridge case, among the three major operations, the use of labour services, as long as it was employed, was heavily biased to the harvest.

The harvest appears to be the operation that had most extensive use of customary labourers. It is known that due to the heavy demand for labour, harvest services lasted for an extended period.³¹⁵ On a few demesnes, even as late as the fifteenth century, the whole harvest was finished by customary labourers, with the help of the *famuli*. In 1409/10 this generous use of harvest boons was found on seven Winchester demesnes. It persisted on the Merdon demesne throughout the record that ended in 1454/5. In 1409/10, the sown acreage was 253 on that demesne and all were worked by customary labourers.³¹⁶ On another Winchester demesne at Ecchinswell, the same practice was maintained till c. 1441 and recovered temporarily in 1449 and 1452. At Harwell, labour service was responsible for the whole harvest as late as 1447. At Meon, paid harvesters were not employed until the summer of 1432.³¹⁷ The Norwich Priory estate at Flegg (Norfolk) also received generous harvest boons from the villagers in the first two decades of this century, whilst on the other demesnes a few

³¹⁵ W. O. Ault, *Open-field farming in medieval England: a study of village by-laws* (London, 1972), p. 29.

³¹⁶ M. Page, *The pipe roll of the bishopric of Winchester, 1409-1410*, *Hampshire Record series*, 16 (Winchester, 1999), pp. 376-377; HRO, 11M59/B1/156.

³¹⁷ HRO, 11M59/B1/150-191.

casual labourers were hired.³¹⁸ These cases are striking evidence that demonstrates the substantial use of labour services in the fifteenth century and that contradicts the common assumption that it was mostly released before this period.

It is more common that customary labourers were responsible for a part of the work and sometimes a considerable part. At Longbridge Deverill, the harvest was done by both the harvest service and the harvest boon. The service was responsible for 33.75 acres and the harvest boon varied. In 1435/6, overall 66.27% (41.75 acres) was done by all sorts of services; in 1440/1, it was 76.6% (50.75 acres).³¹⁹ At Werrington, oats were reaped by customary labourers and a few paid labourers. In 1412/3, the service (*opus*) accounted for harvesting 26, *i.e.* the field of oats, of 53.5 acres; *i.e.* 49.06% of the total harvest work.³²⁰ In other places, people relied on the harvest boon. At Meon, in 1433/4, 239 out of 290.5 acres (82.27%) were harvested by the boon-work. The proportion remained high until cultivation ceased. On another Winchester demesne at Ebbesbourne, 32 of 144 acres were finished by the boon-work in 1439 and the amount was reduced to 22 acres in 1442.³²¹ At Plumstead (Norfolk), 176.75 acres of 194.75 acres were harvested in the summer of 1410 by customary labourers, who accounted for 90.76% of the harvest work.³²² On another Norwich

³¹⁸ NRO, DN EST 9 12.

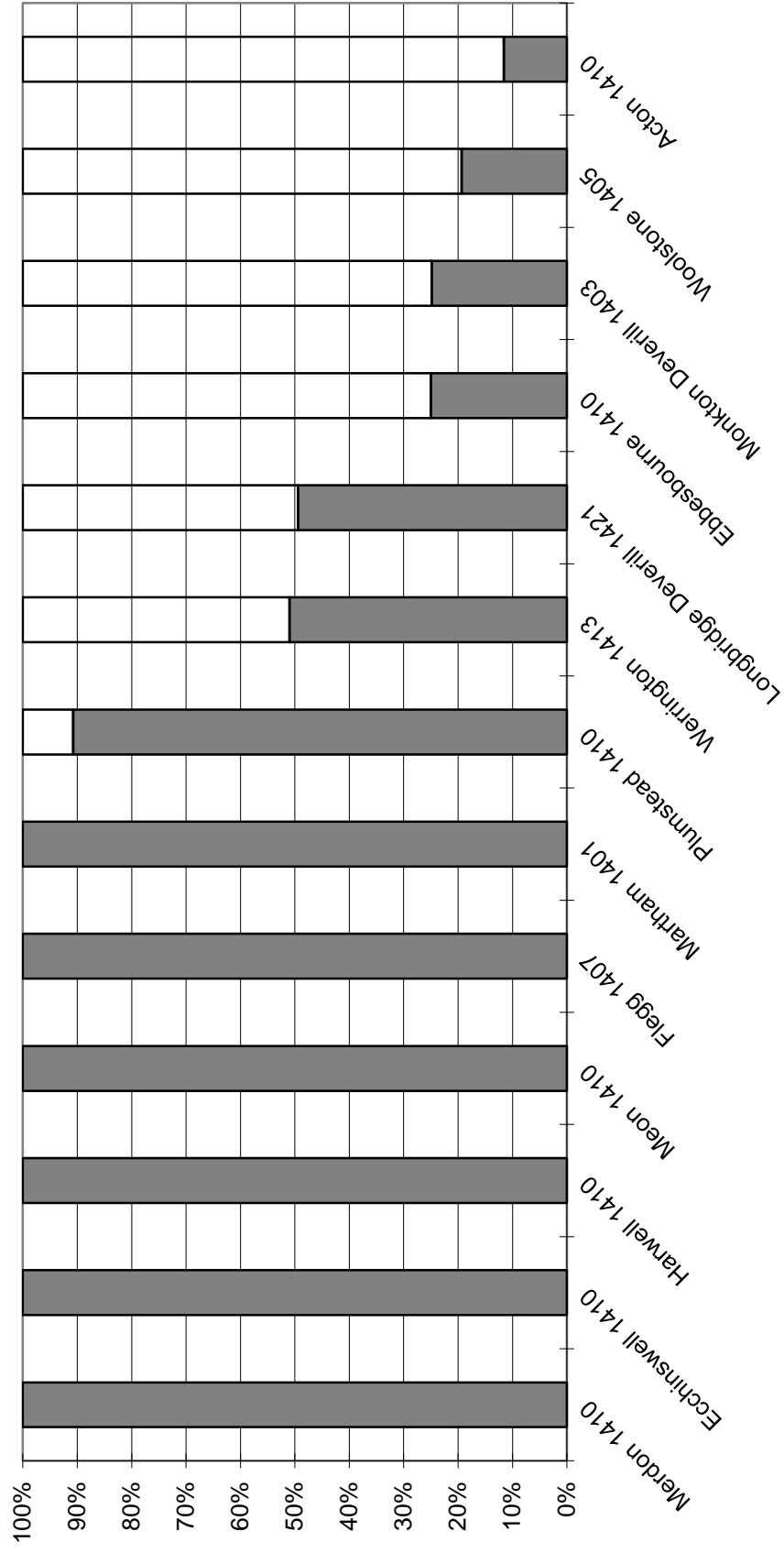
³¹⁹ SHC, T\PH\lon/2/6/9825, 9832.

³²⁰ DRO, D52/1 Werrington 1453/4.

³²¹ HRO, 11M59/B1/176-182.

³²² NRO, DCN 60/29/42.

Chart 4.5 The comparative importance between customary labour and casual labour in the harvest in the early fifteenth century



Sources: HRO, 11M59/B1/156; NRO, DN EST 9/12; DRO, D52/1 Werrington 1412/3; SHC, T\PH\lon/2/6/9828; NRO, NRS 20D2 5905; SHC, 9692; TNA, SC 6/757/21; TNA, SC6/989/13; NRO, DCN 60/35/43.

Priory estate at Martham, in the summer of 1401, 460.5 harvest services reaped, bound, and stacked 153.5 acres of crops, that is 91.64% (153.5/167.5) of the total.³²³

Chart 4.5 is produced to illustrate the comparative importance between labour service and casual labour in the harvest before c. 1420 on selected demesnes.³²⁴ The Chart shows that on the demesnes that used customary labourers, a considerable part of the harvest work was finished by them rather than by casual labourers.

The substantial use of customary labourers in the harvest is indeed an exception in this concluding phase of customary labour. As to threshing, by 1400 most work was taken on by paid labourers and only on a few manorial demesnes was it finished by customary labourers as in the previous century as reported by Farmer.³²⁵ The most extensive employment of customary labourers is still found on the Merdon manorial demesne, where throughout our period, the task was completely done by the service (*trituras per opera*). This arrangement processed a large amount of grain produce of 106qrs of wheat, 5qrs of curall, 81qrs of barley, 6qrs 2bu of legumes and 45qrs 1bu of oats in 1409/10; and it still processed 80qrs 2bu of wheat, 2qrs 1bu of curall, 76qrs 4bu 2p of barley, 6qrs of legumes and 82qrs 1bu of oats in 1454/5. This task was

³²³ NRO, NRS 20D2 5905.

³²⁴ The table does not include all the manorial demesnes that owned labour services, because of two reasons. First, it is not easy to assemble the quantity of customary labour and some of the data, e.g. Acton and Taverham, are estimated with great risks. Therefore, only the clear data are assembled for this chart. Secondly, my purpose is to demonstrate the impact of the abandonment of customary labour. A good number of clean data are sufficient for illustrating the change between the early fifteenth century and the mid-century.

³²⁵ Farmer, 'Prices and wages, 1350-1500', pp. 468-469.

worth around £2 8s 5½d and £2 5s 1½d respectively.³²⁶ Considerable as it is, it is a lone case in the sample. On other demesnes, only a tiny amount of threshing task, if ever, was done by labour service. On the Battle Abbey demesne at Bromham (Wilts.), a practice started in around 1415 to require customary labourers to thresh 6qrs 6bu of wheat. The practice ended in 1422/3.³²⁷ Otherwise, it is hard to find traces of the reported use of threshing service.

Weeding and mowing were another group of tasks that used customary labourers, but the labour input is hard to quantify except in a few cases. At Bromham in 1436/7, 1438/9, and 1439/40, three customary mowers worked for three days each.³²⁸ At Woolstone 13 man-days were employed in weeding and mowing by custom (*ex consuetudine*).³²⁹ On the Longbridge Deverill demesne, they consistently worked 3.5 acres.³³⁰ Or in the Werrington account roll, it indicates that there were 115 services of which each was responsible for half acre and 16 perches, but only 13 acres and 32 perches were mown in 1451/2.³³¹ In the record of mowing service usually the accountant gave a brief note, like at Alciston, where casual labourers were hired to mow the Large Meadow ‘besides the labour service’ in 1418.³³² The use of labour services looks insignificant in these two operations. Nevertheless, the labour services

³²⁶ HRO, 11M59/B1/150-191.

³²⁷ TNA, SC 6/1046/18, 19, 21, 24, SC 6/1047/1.

³²⁸ TNA, SC 6/1047/4, 15, 18, 20.

³²⁹ TNA, SC 6/758/4.

³³⁰ SHC, T\PH\lon/2/6/9821.

³³¹ DRO, D52/1 Werrington 1451/2.

³³² ESRO, SAS/G44/72.

used in these two operations lasted longer than the others did.³³³ At Longbridge Deverill when the harvest service and boon were abandoned by 1460, the mowing service remained until 1481 as stated.³³⁴ These two operations did not demand much labour. It is hardly surprising that they provide another example of the marginal use of customary labourers.

The only continuous labour service that was still used in the fifteenth century is ploughing. According to Postan, in the twelfth and thirteenth centuries, the *famuli* had taken over the great majority of ploughing duties, with a smaller portion left to labour services.³³⁵ For some reason, this limited use of ploughing services lasted into the fifteenth century.³³⁶ At Hurdwick and Werrington (Devon), a small part of ploughing was done by around 20 services in the latter half of this century.³³⁷ The Winchester demesnes usually maintained a small but persistent number of ploughing services. For example, at Ebbesbourne, about 12 acres, which were approximately 12 man-days, were done by such services, in contrast to the sown acreage of around 150 acres that required roughly 450 man-days. At Ecchinswell, 20 acres were done by customary labourers; this duty was increased in 1406/7 to 24 acres and was released in 1441/2.³³⁸

This tiny ploughing service was common during this period, except at Merdon, where

³³³ Carriage probably lasted as long as mowing, but it is not included in the discussion because the detail of this service is normally unspecified.

³³⁴ SHC, T\PH\lon/2/7/9961.

³³⁵ Postan, *The famulus*, pp. 3-4.

³³⁶ Farmer, 'The *famuli*', p. 219.

³³⁷ DRO, D52/1 Hurdwick 1462/3-1497/8; DRO, D52/1 Werrington 1412/3-1498/9.

³³⁸ HRO, 11M59/B1/150-191.

customary labourers ploughed 120 acres in 1409/10. This service was yet another insignificant labour service as against the harvest service.³³⁹

The persistency of customary labour is a peculiar phenomenon in contrast to the falling importance of labour services. Apart from the cases illustrated above that used services extensively, during the fifteenth century, many manorial demesnes still used labour services in an insignificant amount that was hardly meaningful for the demesne finance. It is interesting to consider why this tiny amount of services was kept by the demesne or accepted by the tenants, when apparently its removal would not incur much difficulty to either party. The other feature is that, when the manorial demesne was unable or unwilling to keep labour services in other farming activities, the harvest operation was receiving an asymmetric concentration of services. From the economic aspect, it seems that the manager intended to secure the harvest labour supply or to reduce the cost of harvest labour as much as possible when labour services were available. The concentration on the harvest provides the only viable channel, in which we are able to examine the financial impact of the abandonment of labour services. This feature is, however, puzzling from the social aspect, because on the sample demesnes customary labourers did not seem to be resisting the services even though the harvest was the period for villagers to earn extra incomes.

³³⁹ Page, *The pipe roll*, pp. 374-377.

4.3 The financial impact of the abandonment of labour services on the manorial demesne

The concentration of employing customary labourers in the harvest task implies that the use of labour services could be considerable during a short period in the year due to the high demand for harvest labour. When mass release of customary labourers happened on a large demesne farm, the surge in demand for casual labour might stress the local labour supply and the increase in the cost of labour could be a shock to the demesne finance. On a small demesne, the impact might be smaller, but the demesne might not have the capacity to endure a small amount of the increased cost of labour. In both cases the abandonment could lead to demesne leasing. But there is a third possibility, namely, that the financial contribution of services was not significant and the financial impact was never considerable. Evidence supports the third possibility.

Examination of this impact will be separated into two stages. The change in the workforce has to be addressed in the first place. When the employment of customary labourers fell, it removed a part or a complete sector of the workforce. The vacancy would be filled up by paid labourers, as long as the demesne intended to maintain the production. There were two types of paid labourer: the *famuli* and casual labourers. If the vacancy was taken on by the *famuli*, the labour cost would not increase because the *famuli* were salaried for the year; if the vacancy was taken on by casual labourers, the result would appear in the cost of labour because they were paid immediately. By

confirming which one of the two types of paid labourer satisfied the demand, I shall proceed with the second stage to investigate how the increase in the cost of labour was distributed in expenditure.

As for the change in the workforce, on the Longbridge Deverill demesne, after 1450, the demesne used both the boon-work to work together with casual labourers; and also the *famuli* especially in the 1460s, when the harvest boon was withdrawn as illustrated in Chart 4.1 and 4.2. The *famuli* were a possible choice to take on the vacancy. Indeed, the record from Norfolk shows that customary labourers and the *famuli* regularly worked together. On the Flegg demesne, for example, 132.5 services worked with a group of the *famuli* that included one serjeant, one supervisor, one baker, four reapers who were also the carters, four reapers who also stacked sheaves in the barn, a gooseherd, and one shepherd, working for five weeks in 1407.³⁴⁰ On the Winchester estate at Crawley (Hants.), eight *famuli* were regularly helping customary labourers harvest 50 acres of grain; at Ecchinswell six of them helped customary labourers harvest 68 acres before 1441 and 32 acres after, though their contribution was not specified. Since the *famuli* were permanent workers, it is reasonable that they were required to help when the demesne was in need of labour power.

On the other hand, the Longbridge Deverill case illustrates that the participation of the *famuli* could be limited. In Chart 4.1 they were responsible for less than 10

³⁴⁰ It is assumed that each week contained six work-days. NRO, DN/EST 9/12.

acres of the field every year during the 1460s. The reason is that during the harvest season the two *famuli* were busy on carrying the tithe grain for the glebe that shared the *famuli* with the manorial demesne.³⁴¹ The point is that, although the *famuli* were permanent workers, they were encumbered with other duties and could not take part in ordinary reaping tasks in some cases. At Plumstead (Norfolk), when 90.76% of the reaping, binding, and stacking tasks were finished by customary labourers, the four *famuli*, together with the managerial and other auxiliary manorial staffs, who worked for four weeks with twelve casual labourers to mow, bind and stack sheaves, had nothing to do with those tasks. The four *famuli* were recorded *famuli carectarij* (the servant carters), who did ploughing tasks in the rest of the year, were responsible for carriage in the harvest.³⁴² Although not taking part in reaping, the *famuli* apparently worked hard; or they would not have to work for the whole harvest season and be given board in the lord's household during the work period. Only when the workforce of the *famuli* was large enough, like at Ormesby St Margaret, they were able to take on more extensive responsibilities in the harvest.

The *famuli* were usually recorded as 'helping' during the harvest season. The Winchester Pipe Rolls reveals an interesting case that happened in c. 1441 on some of the bishop's demesnes. At Ebbesbourne, for example, eleven *famuli* were kept in the

³⁴¹ SHC, T\PH\lon/2/6/9815, T\PH\lon/2/8/10706.

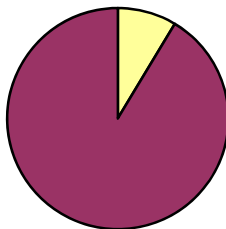
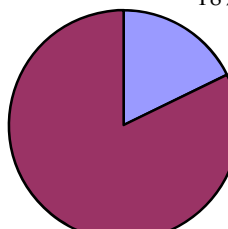
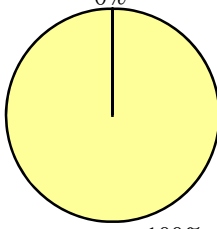
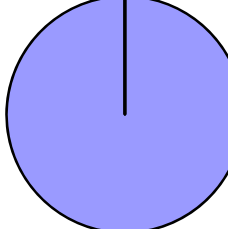
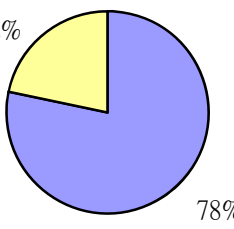
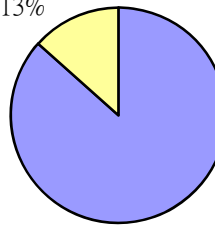

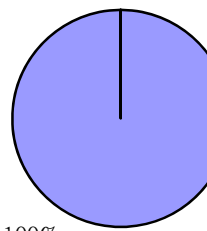
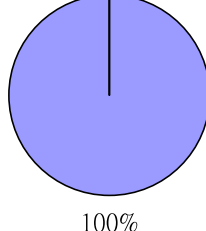
³⁴² NRO, DCN 60/29/42.

period 1400-1455; casual labourers were employed in threshing and in the harvest in the same period; customary labourers had to plough 12 acres, when the majority of around 150 acres was the responsibility of the *famuli*; in the harvest, three harvest boon-works reaped 32 acres until early 1441. There was a sudden change in the composition of the workforce in the 1441/2 account, as shown in Chart 4.6. In that year one harvest boon was released and the responsibility of customary labourers was reduced to 22 acres. The extra 11 acres were taken on by casual labourers. The ploughing service was released and a plough-team was hired (*conducto*) to plough 25 acres and were paid 6d for ploughing each acre. The paid ploughing task gradually increased to 30 acres thereafter. In the same year, casual mowers were hired to replace customary mowers and the cost of labour rose from 20d to 43s 4d.³⁴³ Chart 4.6 shows that the employment of casual labourers absorbed most impact when labour services were removed, and the *famuli* hardly stepped into the vacancies during the change.

Accordingly, the increase in the cost of casual labour was the main burden that was created by the abandonment of labour services. The same pattern is found elsewhere. On the Longbridge Deverill manorial demesne, in the summer of 1452, £4 10s 7d was spent in the harvest for the meals and wages. That was a fairly higher cost in comparison with the amount of £2 15s 5.5d in 1444.³⁴⁴ The cost reached the summit

³⁴³ HRO, 11M59/B1/182-191.

³⁴⁴ SHC, T\PH\lon/2/6/9836, 10613.

| Chart 4.6 Distribution of work on the Ebbesbourne demesne before and after c. 1441 | | |
|--|--|---|
| | <div><div></div> The work done by casual labourers</div> <div><div></div> The work done by the <i>famuli</i></div> <div><div></div> The work done by customary labourers</div> | |
| Operations | Before c. 1441 | After c. 1441 |
| Ploughing |  <p>91% 9%</p> |  <p>82% 18%</p> |
| Mowing & weeding |  <p>100% 0%</p> |  <p>100% 0%</p> |
| Harvesting |  <p>78% 22%</p> |  <p>87% 13%</p> |
| Threshing |  <p>93% 7%</p> |  <p>100% 0%</p> |
| Winnowing |  <p>100% 0%</p> | |
| Source: HRO, 11M59/B1/150-191. | | |

in 1474/5 at £6 12½*d*, when the grain harvest completely relied on casual labourers.³⁴⁵

On the Werrington demesne, the cost of harvest labour was small. It exceeded £1 a few times; and in 1498/9, when the harvest service was no longer, the cost was only 22*s* 5*d*.³⁴⁶ At Flegg, in the summer of 1428, 33*s* 2*d* was paid for the hire of eight casual labourers, in contrast to no casual labourers hired in the summer of 1407.³⁴⁷ On another manorial demesne of Norwich Priory, at Plumstead, £4 11*s* 6*d* was spent on hiring casual harvesters in the summer of 1410; in 1420 the cost was £6 12*s* 4*d*. The difference between them was £2 10*d*.³⁴⁸ The increase in the cost of labour during the change was consistently lower than £3 in these cases.

As for the Winchester estates, where the heaviest use of harvest service is found, at Ebbesbourne, the increase was only eleven extra acres that were newly added to the hand of casual labourers and cost about 9*s* 2*d*. On the Ecchinswell demesne, the cost was 11*s* ½*d* when all 63 acres were harvested by customary labourers in 1442. It was increased to 61*s* 11¾*d* in 1447 to pay for the meals served to customary labourers for doing 32 acres and to pay the wage to casual labourers who harvested 64 acres. The cost increased by £2 10*s* 11¼*d*.³⁴⁹ As illustrated in Chart 4.7, several Winchester demesnes that used labour services only abandoned a part of the services. This was

³⁴⁵ SHC, T\PH\lon/2/7/9955.

³⁴⁶ DRO, D52/1 1498/9.

³⁴⁷ NRO, DN/EST 9/12, 19.

³⁴⁸ NRO, DCN 60/29/42, 46.

³⁴⁹ HRO, 11M59/B1/182, 184.

the reason why the change in the cost was hardly significant even on the large demesne farm at Meon. At Meon the highest cost of casual labourers appeared in 1433 when 48s was spent on harvesting 72 acres, whilst 233 acres were consistently worked by customary labourers. Thenceforth the employment of casual labourers reduced and so did the cost of labour.³⁵⁰ The increase in the cost was around 50s on the Winchester demesnes in general, close to the pattern on other manorial demesnes.

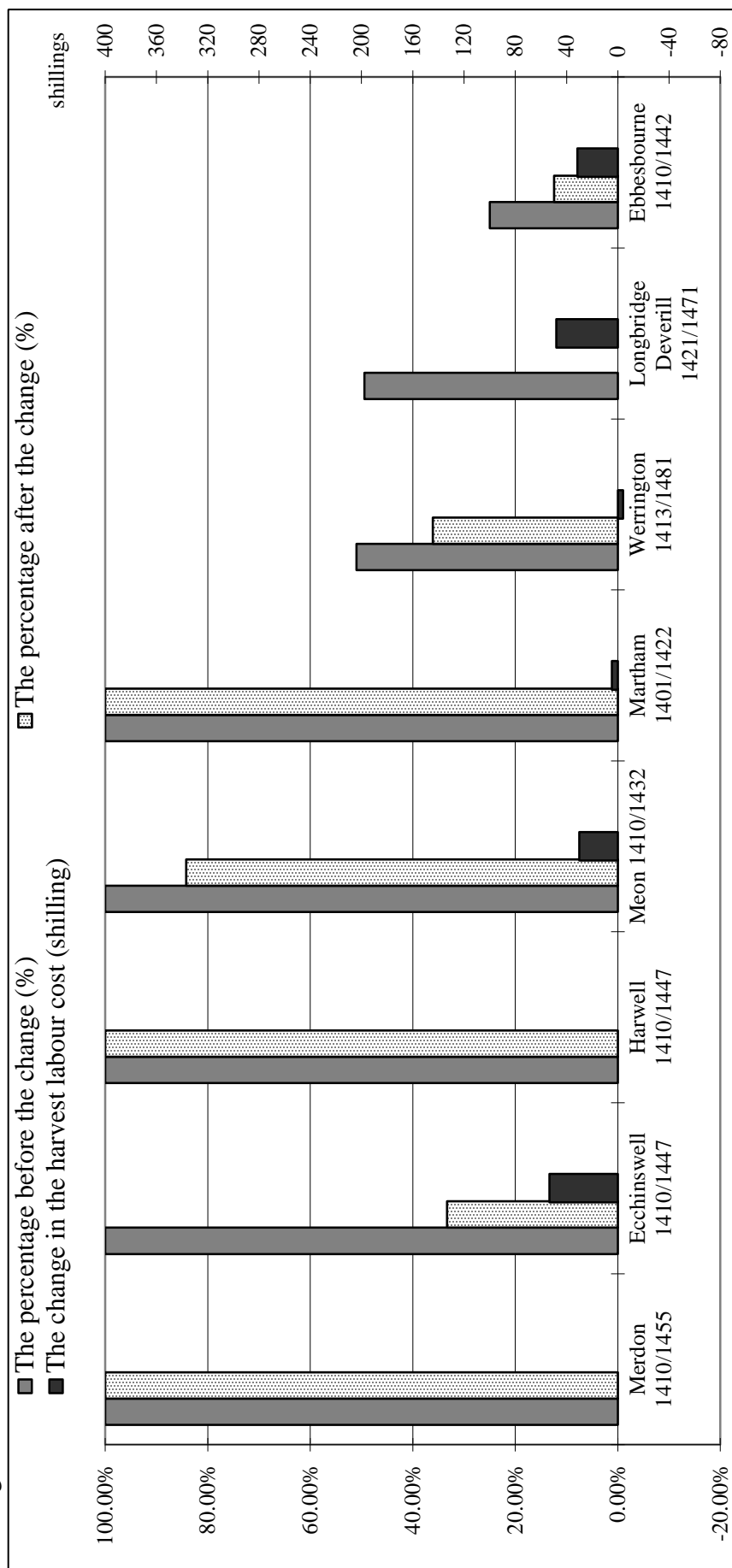
Chart 4.7 presents the change in the percentage of the harvest work taken on by customary labourers before and after the abandonment happened, in addition to the change in the cost of harvest labour. The increase of £2 or £3 was a considerable amount of payment by itself. At Longbridge Deverill, for example, in 1420-1445, the average grain sale was about £5. A half of this income was negated by the increased harvest cost after 1450.³⁵¹ But £3 is insignificant in comparison with the fluctuation in the total expense on this demesne. In the same period, the average total expense of the demesne was about £28 and the standard deviation was around £5.³⁵² In this sense, the £3 was a little more than a half of the magnitude of the ordinary fluctuation. In the Ebbesbourne case, by including the increase in hiring the plough-team and taking the casual mowers into account, the increase in the cost of casual labour after

³⁵⁰ HRO, 11M59/B1/175-191.

³⁵¹ SHC, T\PH\lon/2/6/9815-6, 9818-21, 9823-6, 9829, 9830-3, 9869-70, 9872, 9874-7, 10613, 10615, 10708.

³⁵² Standard deviation is a common measurement of diversity used in statistics. It represents how much the sample disperses from the average value. The standard deviation may be understood as the average value of the fluctuation of the total expense.

Chart 4.7 The percentage of the harvest work done by customary labourers before and after the abandonment of labour services, in addition to the change in the cost of harvest labour



Sources: HRO, 11M59/B1/156, 182, 184, 191; DRO, D52/1 Werrington 1412/3, 1481/2; SHC, T\PH\lon/2/6/9815, T\PH\lon/2/7/9955; NRO, NRS 20D2 5905, 5915; NRO, DCN 60/29/42, 46.

1441 was £3 3s 6d at most. This amount was rather small in comparison with the standard deviation of the demesne's expense, *i.e.* around £17 in 1400-1440, when the average total expense was about £28.³⁵³ The manorial demesne had all sorts of payment that made the total expense fluctuate. If the demesne could cope with the fluctuation, it should be able to bear the extra cost generated by the abandonment that was smaller than the fluctuation. This resilient finance should have been able to bear the impact created by the abandonment of labour services.

Despite the change in percentage in Chart 4.7 in the Ecchinswell and Longbridge Deverill cases, the actual amount of labour involved in this change was insignificant. In Chart 4.7, over 60% of harvest services were released on the Ecchinswell demesne, but the percentage only stood for the harvest of 66 acres. At Longbridge Deverill, the released service accounted for harvesting 50 acres. The size was small in comparison with the size of ordinary manorial demesnes. Larger demesnes, like Meon, were able to keep the majority of services. On the demesnes at Merdon and Plumstead, all the harvest service was kept. Moreover, the fact that the use of labour services focused on the harvest dwarfed its financial significance. Regarding the 50 acres that demanded extra casual labourers as observed at Longbridge Deverill, the increase in the cost constituted a minor expense in comparison with the whole year's work on the same size of the field. In 1453/4, the Werrington demesne sowed 47 acres and one rood.

³⁵³ HRO, 11M59/B1/150-181.

The cost of hiring workers to work in the field was roughly 100s, plus 31s 3¼d spent on threshing in the granary. That made up £6 11s 3¼d altogether.³⁵⁴ On the Monkton Deverill demesne in 1451/2, 56.5 acres were sown and approximately £5 4s 11d was spent on threshing, haymaking, the harvest, and the hire of two acremen whose grain delivery is included in the estimate.³⁵⁵ By counting in the cost of support tasks like maintenance, ditching, carriage etc., the total cost of labour to work on 50 acres of land could be much higher than the cost of harvest labour alone.³⁵⁶

The ineffectiveness of the financial impact is supported by the fact that none of the manorial demesnes in the sample was farmed out because of the abandonment of labour services. The Longbridge Deverill demesne, although giving up all its labour services before 1460 and enduring the increased costs, still cultivated its field until 1481. And it carried on with sheep farming, which profited two times as much as grain cultivation had done, into the 1490s. The Ebbesbourne demesne continued with grain production after 1441, and slightly increased its use of casual labourers in ploughing and mowing as bearing an extra cost of around £3 5s every year in average. At Ecchinswell, after 1441, the demesne started employing casual harvesters and paying £2 15s 10d for their wages. And this demesne was able to operate long enough

³⁵⁴ The cost includes the salaries paid to the ordinary *famuli* that worked in agriculture, e.g. ploughmen, the cost of the harvest, and the cost of weeding and mowing; DRO, D52/1 Werrington 1453/4; Werrington granary 1453/4.

³⁵⁵ SHC, T\PH\lon/2/11/9716.

³⁵⁶ I have to emphasise that 1453/4 the total expense at Werrington was £97 3s 8¼d, and in 1451/2, the total expense at Monkton Deverill was £29 18s 6½d in order to contend for the insignificance of the £3 increment in the cost of harvest labour. DRO, D52/1 Werrington 1453/4; SHC, T\PH\lon/2/11/9716.

to be among the last batch of the Winchester demesnes that were farmed out. The Meon manor farmed out the demesne in 1447, which was 16 years after the demesne starting employing casual harvesters. On the eve of its leasing, the demesne was able to regain its command of labour services and reduce the cost of labour in the harvest. The Meon demesne was not leased out because of abandoning labour services. These sample demesnes could stand the financial burden and maintain grain production.

4.4 Conclusion

The examination has demonstrated that abandonment of labour services during the fifteenth century inflicted limited impact on labour supply in the seigniorial sector and imposed limited burden on the demesne finance. Indeed, when labour services were abandoned, the manorial demesne tended to hire casual labourers to fill the vacancy, which could constitute a considerable proportion of the harvest workforce. The reliance on labour services, however, concentrated in the short period that was of the harvest. On the one hand, in consideration of the labour input of the whole year, the importance of this arrangement was limited; on the other, the demand for labour generated by the harvest work during abandonment of labour services was not large enough to create considerable impact on the supply of labour on the demesne. The amount of the increase in the cost of harvest labour might be conspicuous, like the

Longbridge Deverill case, but in comparison with the overall cost of labour and in consideration of the ordinary fluctuation in the demesne's expenditure, the change was hardly significant. Frankly, if all labour services, which had been employed in the seigniorial sector, were revoked at once, it would generate a shock on the demesne finance; but in this century the amount of labour services was much smaller than it had been in previous centuries. The change, which happened in this century, did not incur critical consequences to demesne farming.

In addition, the pattern of employing labour services in the fifteenth century has some implications. Firstly, it implies that paid labour was already important before this period. The abandonment of labour services left no sign in the labour market. The wage rate did not respond to the change at all, and, at Longbridge Deverill, the harvest wage rate even decreased from 10*d* for harvesting an acre in 1441 to 8*d* in 1458.³⁵⁷ The balance between supply and demand in the local market was unlikely disturbed and labour supply on the demesne was quickly replenished. In fact, the relatively insignificant cost of replacing labour services with casual labourers, even as the whole harvest workforce, suggests that the amount of customary labour involved in the change was limited. This observation leads to a possibility that the demesne manager did not enforced labour services on the villagers to avoid financial burden for the survival of demesne farming, but to exploit whatever resources available in to reduce

³⁵⁷ SHC, T\PH\lon/2/6/9832, T\PH\lon/2/7/9941.

costs. This potential 'entrepreneurial spirit' may also be used to explain the tendency to employ the *famuli* to reduce the demand for casual labour in the harvest in some cases. It is noteworthy that during the change the use of the *famuli* had hardly been affected, suggesting that the *famuli* had a special position in the workforce. The special position will be examined in Chapter 5.

Secondly, the continued employment of labour services provides a socio-economic implication in contradiction to the traditional understanding of the subject. Implicitly, customary tenants might not be resisting labour services. In the agricultural society, there were interpersonal ties that weighed more heavily than economic interests. This possibility may explain why at Longbridge Deverill, as well as in other places, some marginal use of labour services was maintained for an extended period for no apparent economic reason. This possibility may also account for the tenants who came to work on the manorial demesne 'for love' on a casual basis at the tenant's personal disadvantage without visible class coercion. At Werrington, the service of reaping oats (equal to harvesting two acres) was commutable to 4½*d*, whilst the market value of harvesting each acre of crops was about 16*d*.³⁵⁸ From the tenant's point of view, labour service reduced his opportunity to earn the market wage rate by forcing him to serve on the demesne; from the manager's point of view, he should

³⁵⁸ The Werrington account does not give genuine figures of the harvest wage rate. Instead, it gives 1.5*d* for harvesting each acre without further information of this curiously low wage. The wage rate is available from another Tavistock Abbey's estate that was at Hurdwick. DRO, D52/1 Werrington 1458/9; DRO, D52/1 Hurdwick 1462/3.

exploit this cheap labour by cultivating a larger field. However, as the manager could command 91.5 services that were equal to 183 acres, he used only about 10 services; as the tenant could commute it by paying only $4\frac{1}{2}d$ per service, some of them were willing take on the labour service.³⁵⁹ It might be a mere speculation, but a mutual-beneficial tie between the lord, or his local agent, and the tenants, should not be dismissed outright.

³⁵⁹ The fluctuating annual usage implies that the tenants were willing to take on the service when the request came up to them; DRO, D52/1 Werrington 1412-1498.

Chapter 5 The *famuli* in fifteenth-century English agriculture

In the study of late medieval agricultural labour, a critical problem that has been created in the existing studies is the omission of the comparative importance between the two types of paid labourer. Since the early period of the study of economic history, casual labour evidence, especially the wage rate, has been extensively used as a proxy to indicate economic events. Yet casual labour constituted merely a part of the paid labour force and potentially the minor part of it. The economic significance of the permanent paid labourer – the *famulus* – is largely overlooked. In the existing studies of the medieval *famuli* we are told of their basic functions and of their origin back in the Anglo-Saxon period, but little has been said about the contribution of this type of labourer to the demesne and little is known about how they worked in collaboration with day labourers. An study of the management of the *famuli*, thus, will not only contribute to the understanding of how much work they did, but also reconstruct the collaboration of the paid workforce. Thus, the purpose of this chapter is to examine how this type of labourer was managed in fifteenth-century agriculture.

The existing pattern of the *famuli* was constructed by M. M. Postan, who argued that these posts were responsible for the continuous tasks that used to be the

responsibilities of slaves or villeins.³⁶⁰ By 1300, the *famulus* had largely become a paid post.³⁶¹ The basic functions of the medieval *famulus* were elaborated by D. L. Farmer. In the late middle ages the *famuli* were mainly paid labourers, i.e. stipendiary *famuli* in contrast to the earlier service *famuli*. He suggested that they performed a support role in seasonal operations and that this specific type of labourer was disappearing in the fifteenth century.³⁶² Accordingly, A. Kussmaul differentiated between the ‘*famuli* of medieval England ... whose duties were centred on livestock’ and early modern farm servants.³⁶³ D. Youngs has also commented in her study of the farm servants in c. 1500, who ‘appear less like traditional *famuli* in that they were not employed as ploughmen or shepherds, but performed a variety of tasks’.³⁶⁴ In this traditional framework, the *famulus* is depicted as a specialised worker rather than a servant that did all sorts of tasks on the farm. I intend to question this traditional understanding, by illustrating that the employment of the *famuli* was more extensive than has previously been imagined and that they were the permanent workforce on the farm like their early modern counterpart.

Regarding the study of wage labour, collaboration between the two types of paid

³⁶⁰ M. M. Postan, *The famulus: the estate labourer in the 12th and 13th centuries*, *Economic History Review Supplements* 2 (1954), pp. 16-17, 31.

³⁶¹ *Ibid.*, p. 37.

³⁶² D. L. Farmer, ‘The *famuli* in the later middle ages’, in R. Britnell and J. Hatcher (eds.), *Progress and problems in medieval England* (Cambridge, 1996), pp. 211-214, 221-225, 236.

³⁶³ A. Kussmaul, *Servants in husbandry in early modern England* (Cambridge, 1981), p. 7; Postan, *The famulus*, pp. 16-17, 31.

³⁶⁴ D. Youngs, ‘Servants and labourers on a late medieval demesne: the case of Newton, Cheshire, 1498-1520’, *Agricultural History Review*, 47 (1999), pp. 145-160.

labourer – casual labourers and the *famuli* – should be considered as the centre of this subject. But the existing study of the *famuli* has isolated them from other farming tasks, like threshing, weeding/mowing, and the harvest. In the existing studies of the labourer's living standard, the concentration on casual labour evidence has omitted the income of the *famuli*.³⁶⁵ In the discussion of the demesne finance, the focus on the same casual labour evidence has also marginalised the importance of the cost of this type of labourer.³⁶⁶ These opinions need amendment. It has been demonstrated in Chapter 3 that casual labourers were normally employed in collaboration with other types of labourer. And it has long been suggested by R. A. L. Smith that the *famuli* were potentially the main labour force on the farm.³⁶⁷ It is strange that this potential main labour force has not been quantitatively evaluated in terms of its importance in late medieval agriculture.

It is possible that the employment of the *famuli* has not been appropriately studied in detail because the source material does not support detailed examination.

The accounting practice usually gave a simplistic record to their activities. However,

³⁶⁵ J. E. Thorold Rogers, *A history of agriculture and prices in England*, v. 1-7 (1866-1902); W. Beveridge, 'Wages in the Winchester manors', *Economic History Review*, 2nd ser., 7 (1936), pp. 22-43; idem, 'Westminster wages in the manorial era', *Economic History Review*, 2nd ser., 8 (1955), pp. 18-35; D. L. Farmer, 'Prices and wages, 1042-1350', in H. E. Hallam (ed.), *The agrarian history of England and Wales*, vol. 2 (Cambridge, 1988), pp. 715-817; idem, 'Prices and wages, 1350-1500', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 431-525.

³⁶⁶ E. A. Kosminsky, 'The evolution of feudal rent in England from the 11th to the 15th centuries', *Past and Present*, 7 (1955), pp. 12, 29; A. R. Bridbury, 'The Black Death', *Economic History Review*, 2nd ser., 26 (1973), pp. 583-584.

³⁶⁷ R. A. L. Smith, *Canterbury Cathedral Priory: a study in monastic administration* (Cambridge, 1969; 1st ed. 1943), p. 124-125; F. G. Davenport, *The economic development of a Norfolk manor 1086-1565* (Cambridge, 1906), p. 21.

there are two possibilities to amend this problem. It has been illustrated in Chapter 2 that it is easy to find the gap between the amount of the total work and the amount that was done by casual labourers in the manorial account roll. When the demesne did not employ customary labourers, the gap must have been coped with by the *famuli*. Alternatively, the examination can be much easier with detailed record; and detailed record indeed exists. Chapter 3 has illustrated the detailed record of the *famuli* on the Ormesby St Margaret demesne, where the *famuli* accounted for around 40% of the harvest work. Similar record is available on other manorial demesnes and detailed information is more abundant than it has been assumed. This group of demesnes that produced relatively detailed records includes Ormesby St Margaret, Plumstead, Flegg, Martham, and Taverham (Norfolk); Alciston and Lullington (Sussex), Longbridge Deverill and Monkton Deverill (Wiltshire); and the group that provides implicit, yet probable details, includes Elvethall and Pittington (Durham). This sample is small and geographically limited, but it is well suitable for reconstructing the management of the fifteenth-century *famuli* to supplement traditional understanding.

In order to illustrate that the *famuli* were the main labour force on the manorial demesne, I intend to examine it through three sub-topics. Firstly, the source material suggests that the fifteenth-century *famuli* were hardly specialised workers; they were more like the early modern farm servants that were full-time workers and that took on

ploughing as a main duty, and regularly participated in other operations. The purpose of this section is to establish that the *famuli* were permanent workers on the manorial demesne. Secondly, since the *famuli* were the permanent labour force, it is reasonable to assume that they were more important than the casual labour force in agriculture. The second section is devoted to demonstrating the importance of the *famuli* in terms of the labour input and the labour cost, in comparison with casual labourers'. Thirdly, since the *famuli* constituted merely one of the two paid labour forces, it is essential to understand how they were managed in collaboration with casual labourers. Therefore, in the last section, I intend to explain in what conditions the *famuli* were used in place of casual labourers and *vice versa*. In the end, the fifteenth-century *famuli*, as the main agricultural labour force on the manorial demesne, shall be established.

5.1 The terms of employment of the fifteenth-century *famuli*

Etymologically, *famulus* referred to a servant that has personal connection with the household.³⁶⁸ In the context of fifteenth-century agricultural wage labour, this term might refer to other types of labourer, but the way, in which they were recorded in the manorial account, secures their position as a special type of labourer. First, they were recorded in a special payroll; secondly, they always worked for an extended period; thirdly, they worked in seasonal operations without being paid, because they

³⁶⁸ L. R. Poos, *A rural society after the Black Death: Essex 1350-1525* (Cambridge, 1991), pp. 184-187.

received an annual salary package; fourthly, in some cases they were called the servants of the manor or of the court (*famuli manerij* or *famuli curie*). It is certain that there was a special type of agricultural labourer in the fifteenth century, but there is less understanding of many specific aspects of his employment.

In Farmer's study of the *famuli* he predicted that the *famuli*, though disappearing in the late middle ages, might survive in some form; and in Kussmaul's study of the servants of husbandry, she indicated that they might be the successors to the *famuli*.³⁶⁹

The two historians have delivered two different conceptions. In Farmer's conception, the *famuli* were responsible for ploughing, attending the livestock, doing carriage, and serving as administrators, whilst being a support labour force in other operations.³⁷⁰

Kussmaul's discussion focuses on the life of the servants. She suggested that farm servants and domestic servants were alike. As one worked in the field doing a variety of tasks, the other attended domestic tasks.³⁷¹ They were young, serving servanthood as a life-cycle employment. The difference between the two seems to be that Farmer's pattern indicates a type of specialised labourer and that Kussmaul's elaborates an ascending process in which a servant entered service as an unskilled teen gradually ascending to the rank of skilled labourer. P. J. P. Goldberg has accepted this difference suggesting that the *famuli* were permanent labourers rather than life-cycle servants

³⁶⁹ Farmer, 'The *famuli*', p. 236; Kussmaul, *Servants in husbandry*, p. 7.

³⁷⁰ Farmer, 'The *famuli*', pp. 211-225.

³⁷¹ Kussmaul, *Servants in husbandry*, pp. 1-2.

because they were not 'entirely dependent upon their employment'.³⁷² But a few historians have tried to use the flimsy medieval evidence to establish the link between the two patterns. L. R. Poos has attempted to compare servants and the *famuli* (he used the term 'servants in husbandry') by means of terminology, the record of ages, and legislation that referred to the two groups in the same way. In the end he was able to argue that in the late middle ages the *famuli* were employed in a similar manner to the early modern pattern.³⁷³

As far as wage labour is concerned, the work of Goldberg and Poos highlights an important distinction which must be made. If the *famuli* were servants, they must have worked in a variety of tasks as reported by Youngs on Humphrey Newton's estate.³⁷⁴ If they were specialised labourers, they should focus on the designated responsibilities acting in the pattern implied in Farmer's study. This question relates to how the *famuli* worked in collaboration with casual labourers. In this section, I intend to address this question and demonstrate that the *famuli* were a permanent, paid labour force on the demesne, by examining how they were paid, how the contract was struck, how much work they did in their designated responsibilities, and how frequently they were involved in seasonal operations.

³⁷² P. J. P. Goldberg, 'What was a servant', in A. Curry and E. Mathew (eds.), *Concepts and patterns of service in the later middle ages* (Woodbridge, 2000), p. 3; idem, 'Migration, youth and gender in later medieval England', in P. J. P. Goldberg and F. Riddy (eds.), *Youth in the middle ages* (York, 2004), p. 90.

³⁷³ Poos, *A rural society*, pp. 183-206.

³⁷⁴ Youngs, 'Servants and labourers', pp. 145-160.

Regarding the terms of employment, the source material indicates that the fifteenth-century *famuli* were employed to take on different responsibilities as shown in Table 5.1. The *famuli* did administration, ploughing, animal-herding, carting and auxiliary tasks. Among them, the ploughman, the harrower, the oxherd, and the carter were ordinary farm workers who worked in cultivation. The worker who ploughed did not necessarily bear the title of ploughman. He might be the holder of the plough or the driver of the plough, of which the former controlled the plough and the latter led the draught-beasts. The oxherd was a ploughman given the extra duty of taking care

| Table 5.1 The composition of the <i>famuli</i> on the Alciston demesne, Sussex, 1449, and on the Ebbesbourne demesne, Wiltshire, 1449 | | |
|---|-----------------|--------------------|
| | Alciston (1449) | Ebbesbourne (1449) |
| Lesser officials | 2 | 3 |
| Carter | - | 1 |
| Ploughman | 8 | 2 |
| Harrower | 2 | - |
| Shepherds | 3 | 3 |
| Cowherd | 1 | - |
| Oxherd | - | 1 |
| Maid/Dairymaid | 1 | 1 |
| Lambing helper | 1 | - |
| Clerk | 1 | 1 |
| <p>Note: Lesser officials consisted of reeves, serjeants, bailiffs, haywads, ploughing and harvesting supervisors.</p> <p>Ploughmen included both plough-drivers and plough-holders</p> <p>Shepherds included the shepherds of wethers, of ewes, and of yearlings.</p> <p>Cooks, clerks, and temporary helpers were excluded.</p> <p>Sources: ESRO, SAS/G44/102; HRO, 11M59/B1/187.</p> | | |

of draught-beasts.³⁷⁵ A few officials might also take on this responsibility, like at Ebbesbourne, where a supervisor of ploughing and sowing worked as an experienced ploughman. There were, therefore, four ploughing staffs at Ebbesbourne and they were sufficient to man two plough-sets. The shepherds were responsible for pasturing. As a custom, the sheep flock was separated into three groups of wethers, ewes, and lambs. Each group demanded one shepherd. The Alciston and Ebbesbourne cases illustrate the general composition of the *famuli*. In this research the *famuli* who did direct physical labour in the field are the focus, because their labour input can be estimated by the amount of work on the demesne. The administrative and auxiliary *famuli* will only be discussed when their workload is known.

In detail, the fifteenth-century *famulus* was mostly a fully paid worker in contrast to the predecessor of this post, i.e. ‘service *famulus*’ who took on the post in exchange for the holding. This early pattern was still used at the end of the fourteenth century, though to a small extent, on the estate of the bishops of Winchester and the estate of the Glastonbury Abbey.³⁷⁶ The relic of it was still found after 1400. At Downton (Wilts.), before 1418, eleven out of nineteen *famuli* were recorded as service *famuli* including two oxherds and three shepherds, with six stipendiary plough-drivers. In 1422/3, most stipendiary *famuli* were no longer employed whilst the service *famuli*

³⁷⁵ This arrangement is supported by the record from Downton, where in 1423-1429 a ploughman (*carucarius*) is said to be also an oxherd (*qui simul est bovarius*). Hampshire Record Office (hereafter HRO), 11M59/B1/169-173.

³⁷⁶ Farmer, ‘The *famuli*’, pp. 210-211, 223.

remained.³⁷⁷ During the same period, there was also a service shepherd on the nearby manorial demesne at Ebbesbourne.³⁷⁸ They were given quittance of rent, but, except to a few officials, the quittance contained ‘nothing as they received deliveries of the lord’ (*nichil quasi ad liberacionem domini*).³⁷⁹ As far as the records illustrate, there was no significant difference between the employment of the service *famuli* and the stipendiary *famuli* on the said estates during this period. Both of the groups of *famuli* on the two demesnes were paid a certain amount of stipend for the year (*per annum*) on equal terms and given a quarter of barley every 12 weeks, despite the legal status. In the sample, the *famuli* who took part in physical labour were all paid labourers.

This class of workers was paid for the period that they worked and they appear to have worked regularly according to how the salary was counted. The salary consisted of cash, i.e. the stipend, and grain, i.e. the grain delivery. The stipend was counted by the work-period, usually a year. At Hurdwick (Devon), it was counted by the week, i.e. 9*d* per week to the bailiff and 8*d* to the ordinary *famulus*.³⁸⁰ The same pattern was used at Werrington.³⁸¹ The grain was given for the worker’s nutrition and was issued

³⁷⁷ It was common that *famuli* worked as service tenants rather than stipendiaries in Wiltshire. E. Miller, ‘Tenant farming and tenant farmers: the Southern Counties’, in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 707-708, 710-711. At Ebbesbourne, *famuli* consisted of two lesser officials, three ploughing staffs, three herding staffs, and others; At Downton, before 1418, it employed three or four lesser officials, a huge ploughing crew of eight, five herding staffs including a bullock keeper and a swineherd, and others. There were two service *famuli* at Ebbesbourne, one reeve and one shepherd of ewes. At Downton, one reeve, two haywards, one ploughman, two oxherds, three shepherds, one bullock keeper, and one swineherd, eleven in total were service *famuli*; after 1422/3, the number reduced to nine.

³⁷⁸ For example, in 1451/2, HRO, 11M59/B1/188.

³⁷⁹ HRO, 11M59/B1/150-163, 168-174.

³⁸⁰ Devon Record Office (hereafter DRO), D52/1 Hurdwick 1462-1496.

³⁸¹ DRO, D52/1 Werrington, 1412-1498.

in a few variations. The grain delivery was the common form. Usually a quarter of barley was issued for every 10 weeks as on the estate of the bishops of Winchester or every 12 weeks at Monkton Deverill.³⁸² In Sussex, at Apuldram, the ordinary *famulus* received one bushel of barley every week.³⁸³ At Alciston and Lullington, the grain delivery that was issued between Hockday and Michaelmas was converted into cash – 7d per week – called *vadia* (board money).³⁸⁴ At Hurdwick and Werrington, the grain delivery was totally replaced by cash. And at Ormesby St Margaret the *famuli* ate with the household (*in hospicio*) and did not receive grain deliveries.³⁸⁵ The regular issue of grain delivery suggests that the *famuli* worked on the demesne on a regular basis through the contract period. It implies their regular presence in both the busy and slack seasons.

The *famulus* could only serve as a permanent worker if the post was his only undertaking. This condition has been confirmed in the study of the early modern farm servants, who have been found to be young persons of no means, but in the study of the medieval *famuli* the dispute remains. Farmer has suggested that at the start of the fourteenth century some administrators were virgaters and a few ploughmen were half-virgaters. Their holdings hindered the *famuli* from fully devoting themselves to

³⁸² HRO, 11M59/B1/150-191; Somerset Heritage Centre (hereafter SHC), T\PH\lon/2/10/9880; Farmer 'The *famuli*', p. 208.

³⁸³ The National Archives (hereafter TNA), SC 6/1017/22.

³⁸⁴ East Sussex Record Office (hereafter ESRO), SAS/G44/56-139; TNA, SC 6/1025/10-SC 6/1027/16; Beveridge, 'Wages in the Winchester manors', p. 36.

³⁸⁵ TNA, SC 6/939/2, 3, 4, 8A, 10, SC 6/940/5, 6.

the work on the demesne, such as Richard Felippes and John Moor at Monkton Deverill (Wilts.) in 1420/1; and a ploughman at Hembury, who had five acres. They had to spare time for their own holdings.³⁸⁶ However, it is doubtful that the examples stand for the ordinary pattern. Firstly, in the same study, Farmer has also recognised that, except the administrators, the majority of the *famuli* were fardel-men who owned little more than the cottage and the adjacent yard.³⁸⁷ Secondly, the terms of employment of Felippes and Moor were exceptional in comparison with their co-workers' terms of employment. Felippes and Moor were paid 5s by cash and 1qr barley every 15 weeks for the year. This wage rate was lower than the ordinary wage rate 13s 4d and 1qr barley every 12 weeks.³⁸⁸ It appears that the number of the *famuli* who did not work for the year is relatively small and that the terms of employment are distinct in the original documents.

When the *famuli* worked for less than a year, they were almost always identified by their special term of employment and by their lower wage rate. In one case, at Longbridge Deverill in 1406/7, a ploughman who was under a contract of 257 days between Michaelmas and the feast of St Barnabas was only demanded to work 120

³⁸⁶ It is not clear whether Farmer considered the *famuli* to be full-time farm workers or not. In one instance, he called them 'full-time *famuli*'; but in the discussion of land-holding of the *famuli*, he was demonstrating that the *famuli* usually had their own holdings. I take this as an inconsistency; and in this instance I take the land-holding *famuli* to be Farmer's stance of the economic background of the ordinary *famuli*. Farmer, 'The *famuli*', pp. 208, 227-229.

³⁸⁷ Farmer, 'The *famuli*', pp. 227-229.

³⁸⁸ Ibid.

half-days by record.³⁸⁹ The *famuli* who worked between Longbridge Deverill manorial demesne and the glebe of the village were always recorded as receiving a half of the wage from each party.³⁹⁰ The accountant seems to have been obliged to specify the differences, because the different terms related to different payments. The record of the ordinary arrangements forms a distinctive body of evidence in the accounts and indicates that the majority of the *famuli* worked on a permanent basis by the year. This arrangement appears to have been recognised by contemporaries because it was the basis for the wage legislation to regulate their salary.³⁹¹

The source material allows us to conclude that the ordinary *famuli* were mostly paid workers working through the year. In Table 5.1, by excluding the lesser officials and the auxiliary *famuli* that include the maid, the lambing helper, and the clerk, only two *famuli* were hired on odd terms. They are the two harrowers who worked for a half year over the two sowing seasons at Alciston. At Pittington there were four permanent *famuli* in 1450/1. At Elvethall there were five in the same year, without part-time arrangements.³⁹² At Acton, eleven ordinary *famuli* were hired, in addition to the cowherd and the swineherd, who were herding the lord's flocks.³⁹³ This specific group of the *famuli* constituted the main body of the *famuli* employed on the demesne.

³⁸⁹ SHC, T\PH\lon/2/8/9610.

³⁹⁰ SHC, T\PH\lon/2/6/9815, T\PH\lon/2/8/10706.

³⁹¹ *SoR*, 2, pp. 57, 338.

³⁹² Dean and Chapter of Durham Muniments (hereafter DCDM), Pittington Account Roll (hereafter PAR) 1450/1.

³⁹³ TNA, SC 6/989/13.

Their activities, as we shall see, are found in a range of farming operations.

As for the work taken on by the *famuli*, whilst the yearly contract implies that they worked throughout the year, the nature of their ordinary responsibilities indeed required them to work full-time and intensely. The shepherd, firstly, had to pasture the sheep everyday, to fold them every night, and to mend the fold whenever needed, as taught in *Seneschaucie*: ‘...(the shepherd) ought to sleep in the fold, he and his dog; and he ought to pasture his sheep well, and keep them in forage, and watch them well, so that they be not killed or destroyed by dogs or stolen... No shepherd ought to leave his sheep...’.³⁹⁴ As long as the shepherd did not leave the flock, he was allowed to do other things, like pasturing his own flock with the lord’s flock on the condition of not mixing them up.³⁹⁵ Because of the requirement of staying with the flock, the shepherd was not able to take on other work even in the fold. In the early spring, for example, young helpers were hired for the lambing for several weeks, so the shepherd could rest at the night.³⁹⁶ In the summer, casual labourers or customary labourers were employed for shearing sheep, whilst the shepherd was herding the rest of the flock.³⁹⁷

The requirement of staying with the flock made the shepherd a fine example of the full-time employment of the *famuli*; and the same requirement also made him a rare

³⁹⁴ E. Lamond (ed. and trans.), *Husbandry: together with an anonymous Husbandry, Seneschaucie and Robert Grosseteste’s Rules* (London, 1890), p. 115.

³⁹⁵ TNA, SC 6/1026/16.

³⁹⁶ Lambs could come at any time day and night. Lambing would be extremely tiring, if the shepherd was requested to do it alone. At Alciston, the helper was hired for ten weeks, ESRO, SAS/G44/68; at Longbridge Deverill the helper was called ekhurd, hired for nine weeks, see SHC, T\PH\lon/2/6/9874.

³⁹⁷ For example, ESRO, SAS/G44/106; DRO, D52/1 Werrington 1451/2.

participant in other operations.

Ploughing is known to be a laborious task, which should keep the ploughman in intense and continuous work; but ploughing was a seasonal task that was required for a certain period in the year. The sowing seasons in the autumn and the spring needed the *famuli* to plough for around six months. After that, the *famuli* were likely to take on fallow-ploughing that continued the spring sowing. Since the *famulus* was paid for the year, reasonably he should take on other tasks. Regarding this point *Seneschaucie* indicates that the ploughman was not only responsible for ploughing, but also for taking care of oxen, ditching, and draining the field.³⁹⁸ The implication is that the ploughman was a multi-tasking post that took on a variety of tasks. The work-period that a ploughman took on should be long enough to exhaust his yearly labour-power. I will illustrate this point as follows.

Regarding ploughing in the sowing seasons, the immense workload did not allow the ploughman much leisure but demanded him to work intensely. Walter of Henley suggested that in the high middle ages a plough-set was able to work up to 160-180 acres each year by ploughing 'three roods and a half daily', *i.e.* 7/8 acre. This is equal to around 60 acres given the field was ploughed three times.³⁹⁹ That is, at this work efficiency, to plough 60 acres, two ploughmen who were demanded for operating one

³⁹⁸ Lamond, *Husbandry*, p. 111.

³⁹⁹ Ibid, p. 9; for the comment on Walter of Henley's statement, see J. E. Thorold Rogers, *Six centuries of work and wages: the history of English labour* (London, 1886), pp. 75-76.

plough-team had to work for around a half year. Campbell has estimated that after the Black Death the average work acreage of each plough-team was 66.6 acres without counting in fallow-ploughing.⁴⁰⁰ On the basis that the ploughing technology had improved since Walter of Henley's time and allowed the plough-team to plough one acre every day, ploughing 66.6 acres should demand around six months.⁴⁰¹ The workload fits the above estimation. On this basis, on many of the sample demesnes the ploughing labour force was employed to a great extent, and that all the figures except Hurdwick and Werrington fit or even exceed Campbell's estimate as illustrated in Table 5.2. Roughly speaking, the ploughmen worked continuously and intensely over the two sowing seasons and finished the task before the end of spring in order to give the crops enough time to mature.

The overall work-period was determined by the sown acreage and crop-rotation. Theoretically, the farm that grew legumes did not need as much fallow-ploughing as the farm that did ploughing on the rested land.⁴⁰² The ploughing for sowing was immediately followed by fallow-ploughing, which is an extended ploughing task.⁴⁰³

⁴⁰⁰ Campbell, *English seigniorial agriculture*, p. 121.

⁴⁰¹ The sample 'optimistic ploughing rate of an acre a day' has been used by Langdon, see J. Langdon, 'The economics of horses and oxen in medieval England', *Agricultural History Review*, 2nd ser., 30 (1982), p. 38.

⁴⁰² In our sample, Bromham was the only demesne that had larger sown acreage but did not grow many legumes. The record is confusing. The demesne had one existing plough and one newly made plough. But it had only two ploughmen, a bailiff, and a maid, with no known labour service or casual ploughmen. Since the total sown acreage 160 acres could not be done by one team, it is puzzling where the demesne got the fourth person to man the second plough. Certainly the maid was involved in it? TNA, SC 6/1047/15. For the technology of growing legumes, see Campbell, *English seigniorial agriculture*, pp. 229-230, and D. L. Farmer, 'Crop yields, prices, and wages in medieval England', *Studies in Medieval and Renaissance History*, 6 (1983), pp. 132-133.

⁴⁰³ There were two fallowing strategies: one was fallow-ploughing, the other was resting the land; P. F. Brandon, 'Demesne arable farming in coastal Sussex during the later middle ages', *Agricultural History Review*, 19 (1972), pp. 125-126.

Table 5.2 The average labour input of the plough-team without fallow-ploughing

| | average input (acres) | | average input (acres) |
|--------------------|----------------------------|----------------------------|-----------------------|
| Alciston 1450/1 | 70.9 | Longbridge Deverill 1451/2 | 73.75 |
| | = 283.5 acres / 4 teams | | = 73.75 / 1 team |
| Apuldrum 1451/2 | 87 | Lullington 1450/1 | 68.3 |
| | = 174 acres / 2 teams | | = 205 acres / 3 teams |
| Bromham 1436/7 | 80 | Pittington 1450/1 | 65 |
| | = 160 acres / 2 teams | | = 130 acres / 2 teams |
| Ebbesbourne 1451/2 | 67 | Werrington 1451/2 | 51 |
| | = (164-30) acres / 2 teams | | = 51 acres / 1 team |
| Hurdwick 1462/3 | 59.5 | Woolstone 1416/7 | 77.5 |
| | = 119 acres / 2 teams | | = 155 acres / 2 teams |

Sources: TNA, SC 6/758/4, SC 6/1019/2, SC 6/1027/3, SC 6/1047/18; DCDM, PAR 1450; DRO, D51/2 Hurdwick 1462, D51/2 Werrington 1451; ESRO, SAS/G44/103; SHC, T\PH\lon/2/6/9836; HRO, 11M59/B1/188.

The whole ploughing task seems to have carried into the summer and lasted as late as the eve of 1 August. This pattern is observed in the record of employing the fixed-term ploughman, who was specifically hired for the ploughing task. When the ploughing task was done, the fixed-term ploughman left. At Longbridge Deverill in 1406/7, a ploughman worked between Michaelmas, which was the start of the sowing season, and the feast of St Barnabas (11 June), to plough 120 half-days.⁴⁰⁴ At Alciston in 1441/2, Walter Sterman and Peter Wolfe were hired to plough between Michaelmas and Pentecost. Another ploughman was hired between Michaelmas and 24 June.⁴⁰⁵ In 1441-1446, at Alciston several ploughmen were employed between Michaelmas and 1 August.⁴⁰⁶ At Pittington, William Porter's servant Robert drove the plough from Candlemas (2 Feb) to 1 August in 1413, for the spring sowing and fallow-ploughing.⁴⁰⁷ All these fixed-term ploughmen worked side by side with yearly ploughmen. The implication is that their work-period was the period when the demand for ploughing labour was at its greatest. And this period covered the two sowing seasons and lasted to the summer. Between the middle of June and 1 August, the task was likely lighter, because fewer ploughmen were hired.⁴⁰⁸ This temporary arrangement reveals the fluctuation in the ploughing workload that was shouldered by

⁴⁰⁴ SHC, T\PH\lon/2/8/9610.

⁴⁰⁵ ESRO, SAS/G44/94.

⁴⁰⁶ ESRO, SAS/G44/94-98.

⁴⁰⁷ DCDM, PAR 1412.

⁴⁰⁸ There is only one case in our sample that ploughing was done in the harves at Flegg, where two *famuli* were recorded to have been diverted to the plough in the summer of 1422; NRO, DN/EST 9/15.

the *famuli* when no casual helper was hired. Accordingly, the ordinary *famulus* was likely to be less busy in the mid-summer and was probably free from the ploughing task during the harvest.

The intense work of the *famuli* did not stop or reduce in the harvest but rather continued consistently. At Ormesby St Margaret and on other manorial demesnes in Coastal Norfolk, details were preserved to explain how many people were served at the lord's table. The pattern of record is like this:

One bailiff Nicholas Harald, one woman Katrina Lychfeld that is the baker and the brewer, two labourers (*laborii*) within the manor, five ploughmen, Richard Richards, John Chirrene the thresher, five workers (*operarii*) for six weeks this year in the harvest, together with 104 man-days that accounted for 106¾ acres, as a part of 278¾ acres of various grains.⁴⁰⁹

Usually all the ordinary ploughmen and all the carters were taking part in the harvest, together with casual labourers, served by the cook, and supervised by the bailiff. They harvested 172 acres of grains with the five contract harvesters. The number of weeks that they worked demonstrates their consistent presence in this operation. The above arrangement accounted for around 40% of the harvest work.⁴¹⁰ Similarly, at Flegg, four *famuli*, probably the ploughmen, worked in the harvest in 1407 and 1409; and

⁴⁰⁹ TNA, SC 6/939/10.

⁴¹⁰ TNA, SC 6/939/1, 2, SC 6/940/3, 10.

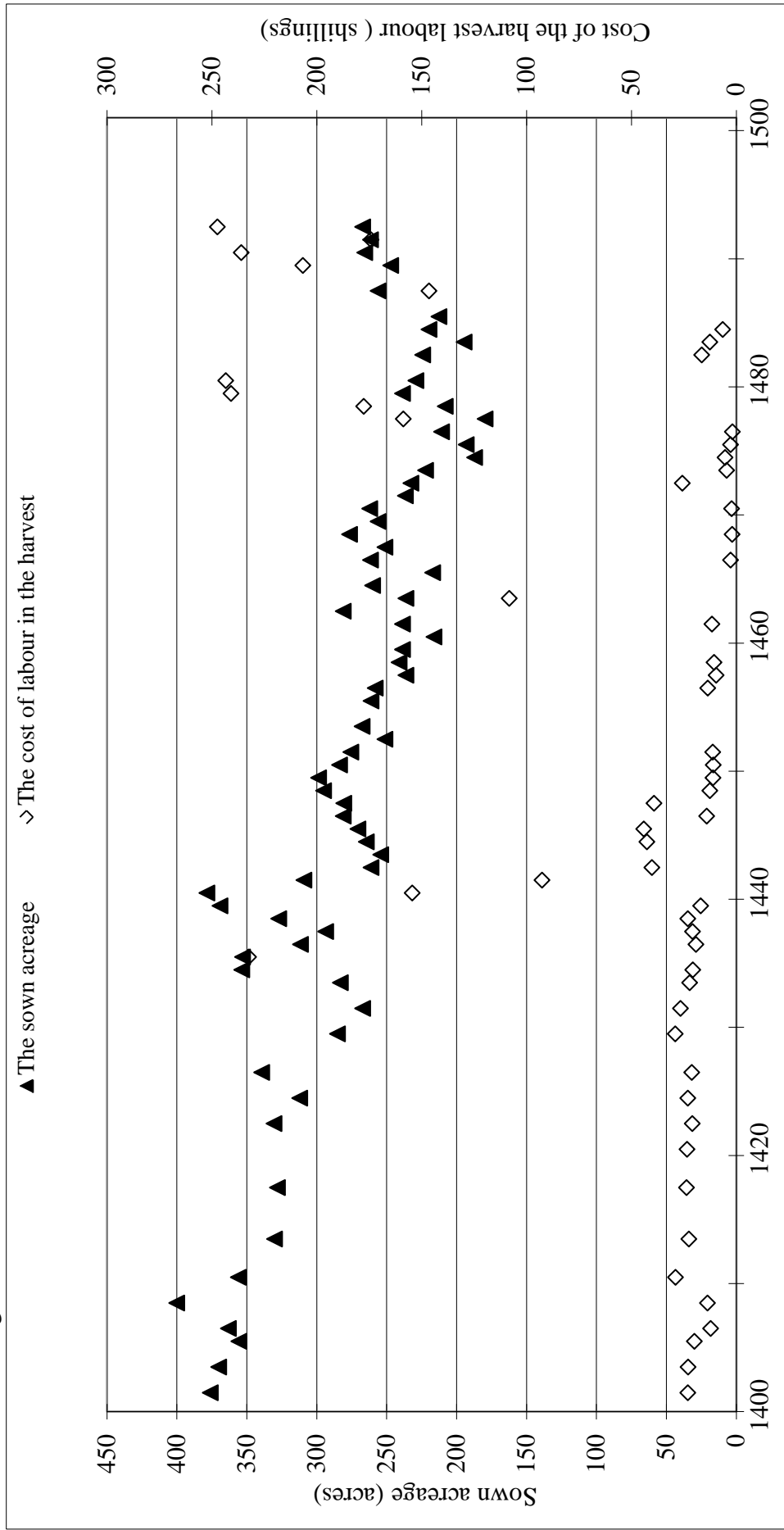
two were recorded working in 1427 and 1428.⁴¹¹ The cases establish robust evidence for demonstrating that there was hardly a gap in their work schedule between 1 August and Michaelmas when the *famuli* were not working with the plough.

More evidence of the *famuli* participating in the harvest can be found by digging through implicit messages in the source material. Indeed, most records related to the *famuli* in the harvest are not as clear as the Norfolk cases, but they provide more than just implications. In the harvest, the practice of giving gloves to the *famuli* indicates their participation. At Acton, for example, it was specified that gloves were given to three lesser officials, two carters, six ploughmen and fifteen household servants to work in the harvest.⁴¹² The implicit accounting practice could hide rather important messages. At Alciston, the accountant only recorded the expense of the harvest meal, without the labour cost and without specifying to whom the food was served. The reason of this strange practice is revealed in the 1440/1 account roll. In the summer of 1441, it recorded that ‘the *famuli* were infirm and some of them died in the pestilence’. In the same year, the harvest cost swelled to £7 14s 5d from 16s 10d in the previous year as shown in Chart 5.1. This suggests that the harvest was originally done by then *famuli*. Before 1441, nine yearly ploughmen were hired. In 1441/2, the number reduced to six, in addition to four term-time ploughmen, as if the manager

⁴¹¹ NRO, DN/EST 9/12-19.

⁴¹² TNA, SC 6/989/13.

Chart 5.1 The arrangement of the harvest labour on the Alciston manorial demesne, Sussex, 1400-1500



Source: ESRO, SAS/G44/56-139.

were not able to fill up the vacancies left by the incapacitated *famuli*. The situation remained until 1446/7, when the harvest cost returned to 14s and the number of the yearly ploughmen was fixed at eight.⁴¹³ This substitution between the *famuli* and casual labourers recurred during the years of plague in c. 1463 and in c. 1480 though without specifications like the 1440/1 case in the source material.⁴¹⁴ This incident alights us to the fact that the use of the *famuli* in the harvest could be so extensive that the hire of casual harvesters was only used to cope with urgencies, in spite of the simplistic accounting practice.

The compact work schedule should have squeezed the *famuli* to a point that they could not have another undertaking. Although relatively insignificant, by counting in the other two seasonal operations – threshing and weeding/mowing – they should be considered as working as full-time workers. For instance, in 1399/1400 the *famuli* of the Pittington demesne mowed the meadow for 40 man-days.⁴¹⁵ At Alciston, they were responsible for threshing legumes and a good part of oats regularly. In 1435/6 and 1436/7, they also threshed 15qrs of wheat and 21qrs 2bu of barley in addition to the great majority of oats and legumes.⁴¹⁶ Reasonably, since the *famuli* were hired for the year, there was no obvious reason to leave them idle when there was work to do.

⁴¹³ ‘et tantum hoc anno quia famuli maneri fuerunt infirmi et aliqui eorum obierunt in pestilence’, ESRO, SAS/G44/92-99.

⁴¹⁴ R. S. Gottfried, *The Black Death: Natural and human disaster in medieval Europe* (New York, 1985), pp. 132-133; J. F. D. Shrewsbury, *A history of bubonic plague in the British Isles* (Cambridge, 1970), pp. 144, 146; C. Creighton, *A history of epidemics in Britain Vol I: from AD 664 to the Great Plague* (Cambridge, 1891), pp. 229, 231-232.

⁴¹⁵ DCDM, PAR 1399/1400.

⁴¹⁶ ESRO, SAS/G44/88, 89.

This extensive use of the *famuli* in casual farming operations should contradict the assumption that they were hired only for ploughing. Even the shepherd, in some rare cases, took part in seasonal operations, like the one at Flegg in 1407 in the harvest.⁴¹⁷ The confusion that assumes the *famuli* to have been specialised farm workers is derived of the titles recorded in the account roll. It has been demonstrated above that the titles indicate their designated responsibilities, but did not limit them to certain operations. In some places, like Pittington and Elvethall, the term *famulus* stood by itself as a title.⁴¹⁸ In explaining the sample that was available to Postan and Farmer, I have proved that the *famuli* frequently took part in seasonal operations.

5.2 The comparative importance of the *famuli*

Given that the ordinary *famuli* were permanent farm workers, it is reasonable to assume that they were also the main labour force, like their early modern counterparts in Lowland Scotland, Wales and Ireland, due to their contracted commitment to the demesne farm.⁴¹⁹ If this assumption is proved true, it shall undermine the importance of casual labourers and establish that the use of *famuli* was more significant in the seigniorial agriculture. The following discussion, therefore, is intended to examine the

⁴¹⁷ NRO, DN/EST 9/12.

⁴¹⁸ On the two demesnes, only the administrators and the carter were recorded with titles.

⁴¹⁹ A. Howkins, 'Peasants, servants and labourers: the marginal workforce in British agriculture, c 1870-1914', *Agricultural History Review*, 42 (1994), pp. 57-58; T. M. Devine, 'Scottish farm service in the agricultural revolution', in T. M. Devine (ed.), *Farm servants and labour in Lowland Scotland, 1770-1914* (Edinburgh, 1984), pp. 1-2.

comparative importance of the *famuli* from two aspects: the labour cost and the labour input.

The yearly contract has inspired historians to calculate the labour input of the *famuli* by estimating the number of work-days during an average year.⁴²⁰ The problem is that the accounting practice omitted recording the ordinary farming activities that were undertaken by the *famuli*, like ditching, hedging, and collecting faggots, leaving the researcher no chance to investigate the details. For this reason, I intend to use the record that is directly available in the source material, despite its apparent limitations. Firstly, record of the sown acreage roughly indicates the total workload of ploughing. It can serve as a plausible basis of the labour input in the designated responsibility of the ploughmen. Secondly, the collaboration of the *famuli* and the casual labourers in operations allows us to recognise the contribution of various types of labourer.

The *famulus* ploughman spent around two-thirds or three-fourths of the year on ploughing. Certainly, it was the most tedious task and demanded continuous devotion. And the source material shows that casual ploughmen were only employed to satisfy temporary needs. For example, a plough-driver at Longbridge Deverill worked on the glebe for six days in 1425/6 in place of John Fewer who was lying infirm.⁴²¹ The odd demand emerged on a more usual basis depending on the sown acreage than such a

⁴²⁰ E. Karakacili, 'English agrarian labor productivity rates before the Black Death: a case study', *Journal of Economic History*, 64 (2004), pp. 49-50; G. Clark, 'Productivity growth without technical change in European agriculture before 1850', *Journal of Economic History*, 47 (1987), p. 426.

⁴²¹ '...loco Johannis Fewer fogatoris iacentis infirmi...'; SHC, T\PH\lon/2/8/10614.

personal incident. And extraordinary demands were satisfied with short-term contracts, unless the demand was too small for contract labour. At Apuldram, as illustrated in Table 5.2, the sown field was usually too large for two plough-teams, but it was too small for a third plough-team. In this case, casual ploughmen or harrowers were hired frequently, but not consistently. In 1435/6, William Cobey ploughed 20 and 28 days respectively in the winter and spring sowing.⁴²² In the next year, Ronald Warde worked 36 days in sowing.⁴²³ In 1447/8, a lad (*garcio*) worked 40 days for the same.⁴²⁴ At Ormesby St Margaret four plough-teams had to cope with 277.125 acres in 1430/1 and the great majority were spring grains that consisted of barley (121.5 acres), oats (12 acres), and legumes (52 acres). The ploughing and sowing tasks demanded 74 man-days of casual labour, of which 60 days were dedicated to barley.⁴²⁵ Casual labour was a support labour force in this task and its use was minimal in comparison with the intense work of the *famulus* who ploughed around 180 days for the sowing and who took on more in fallow-ploughing.⁴²⁶

Regarding the labour input in seasonal operations, unless the involvement of the *famuli* was specified, it is impossible to reconstruct their contribution. The clearest record is found in threshing where the portion done by the *famuli* is documented in

⁴²² TNA, SC 6/1018/8.

⁴²³ TNA, SC 6/1018/9.

⁴²⁴ TNA, SC 6/1018/20.

⁴²⁵ TNA, SC 6/939/8A.

⁴²⁶ Campbell, *English seigniorial agriculture*, p. 121.

relation to that achieved by casual labourers. At Lullington, in 1401/2, all the oats produced, i.e. 19qrs, and 21qrs of legumes were threshed by them, as against the 114qrs 2 $\frac{1}{8}$ bu of wheat, 279qrs 2 $\frac{3}{4}$ bu of barley, and 7qrs 4 $\frac{1}{2}$ bu of legumes worked by casual threshers.⁴²⁷ The Durham Priory estate at Pittington and Elvethall frequently used the *famuli* to thresh the produce, too. In 1422/3, a worker threshed for nine days and ‘the rest was done by the *famuli*’ at Pittington; and only 4s 8d was spent on threshing at Elvethall and the rest was threshed by the *famuli*.⁴²⁸ The record of the harvest operation may provide grounds for believing that the *famuli* regularly took part in it, but the lack of details prevents the possibility of constructing a comprehensive model. The Norfolk and the Battle Abbey cases have formed solid patterns, whilst the Winchester, the Glastonbury, and the Tavistock records have established another pattern, in which the *famuli* seem to have served as a support labour force in the harvest. More difficulties are found in weeding and mowing. Usually, nothing but ‘except the help of *famuli*’ or ‘done by *famuli*’ was recorded. At Bromham, in 1440, the *famuli* did the whole weeding task and that is all we are told.⁴²⁹ At Alciston, they did collecting and hay making for an untold number of

⁴²⁷ For the 1401/2 account roll, TNA, SC 6/1025/11; for the record of farm servants threshing legumes at Lullington during the fifteenth century, see TNA, SC 6/1025/17, 19-23, 25, 26, SC 6/1026/3-27, SC 6/1027/2, SC 6/1027/3-9, 11, 12, 15, 16.

⁴²⁸ The work is specified in the account of grain. For example, in the section of oats, it is indicated ‘*Et de cxxxvj quartiis ij bussellis receptis de toto exitu grangiae ibidem hoc anno trituras per famulos ibidem*’; the same is found in the following year; DCDM, PAR 1422/3, 1423/4. At Elvethall, the record is less clear, but it still says ‘*Et solum pro trituratione hoc anno 4s 8d et non plus quia per famulos curie*’, DCDM, Elvethall Account Roll (hereafter EAR), 1447/8.

⁴²⁹ ‘*In bladis dominice sarculandis nulla quia per famulos manerii*’, TNA, SC 6/1047/20.

man-days.⁴³⁰ In my sample, Pittington is the only confirmed case, where the *famuli* worked in mowing meadows in 1400 for 40 man-days.⁴³¹ Accordingly, we have to be conservative about the result that is presented in Table 5.3.

| Table 5.3 Comparative demesne labour input | | | |
|--|---|---|--|
| | <i>Famuli</i> , man-days (ploughing) | <i>Famuli</i> , man-days (threshing & harvesting) | Casual labourers, man-days (threshing & harvesting) |
| Alciston 1450/1 | 1701 | 708.8 | 285.1 |
| Apuldram 1451/2 | 1044 | n/a | 590.5 |
| Ebbesbourne 1451/2 | 804 | n/a | 482.9 |
| Hurdwick 1463/4 | 882 | n/a | 537.2 |
| Lullington 1450/1 | 1230 | 548.2 | 271.7 |
| Pittington 1413/4 | 810 | n/a | 488 |
| Woolstone 1416/7 | 930 | n/a | 390.4 |
| Sources: ESRO, SAS/G44/103; TNA, SC 6/1019/2; HRO, 11M59/B1/188; DRO, D52/1 Hurdwick 1463/4; TNA, SC 6/1027/3; DCDM, PAR, 1413; TNA, SC 6/758/4. | | | |

In spite of the simplistic accounting practice of the source material, Table 5.3 is able to demonstrate the sheer contrast between the inputs of the two types of labourer. Estimation of the workload of the *famulus* is concentrated on ploughing. As above, we assume that each plough-team ploughed one acre each day and each team manned by two *famuli*. As for the casual labourer's workload, only the inputs in threshing and the harvest are considered, because the detail of weeding and mowing is hard to obtain. The estimate of the threshing labour is converted from the number of piece-works by means of Clark's conversion ratios.⁴³² The estimation of the harvest labour input is

⁴³⁰ For example, ESRO, SAS/G44/84.

⁴³¹ DCDM, PAR 1399/1400. At Pittington, *famuli* were regularly involved in this operation before 1400. Afterwards this task was given to a few *ex-famuli* and later on to some named workers.

⁴³² Clark, 'Productivity growth, p. 426; idem, 'The long march of history: farm wages, population, and economic growth, England 1209-1869', *Economic History Review*, 60 (2007), p. 112.

based on Walter of Henley's indication of one acre demanding 2½ man-days.⁴³³ Table 5.3 gives an impression that, even on the manorial demesne where threshing and the harvest were all done by casual labourers, the casual labour input was around 60% of the *famuli* labour input at most. On the demesnes, where the *famuli* were involved in casual operations, the contrast is even sharper.

Regarding the cost of labour, remuneration of the *famulus* consisted of cash and grain, appended by perks. Record of the cash salary and grain delivery is consistent as stated. The varying value of minor perks can be a nuisance for composing the total cost, but their tiny amount allows them to be ignored from the sample. At Alciston, for example, every year, about 4s 3d was given to all *famuli* (*oblacio famulorum*) at Christmas and Easter; and a few shillings (*rewardus*) was paid to them for driving livestock between places. The value was far less than the sum of the stipends of £11 19s 2d in 1457/8, without counting in the rest of the salary package.⁴³⁴ Therefore, at Alciston in 1450/1, the salary package given to an ordinary ploughman was worth around 33.51s including the grain delivery; at Ebbesbourne it was 22.9s in 1451/2, and at Hurdwick it was 34s 8d in 1463/4. The sum of the salary package given to all *famuli* was 842.26s at Alciston, 216.56s at Ebbesbourne, and at Hurdwick 266s in the same years. The value of the salary of *famuli* was as much as 42.77% of the total

⁴³³ Lamond, *Husbandry*, pp. xl-xli, 69.

⁴³⁴ ESRO, SAS/G44/107.

expense of Alciston manorial demesne by counting in the grain delivery, 36.35% of Ebbesbourne, and 41.35% of Hurdwick.⁴³⁵

The costs of casual labour that were directly relating to crops were consistently recorded in three sections: threshing, weeding/mowing, and the harvest. There were minor payments in other operations, but the minor payments are mostly ignorable for two reasons. Firstly, the amount was small. For example, a plough-driver who worked in place of John Fewer lying infirm on the glebe of Longbridge Deverill, was paid only 6*d*.⁴³⁶ The Apuldrum demesne hired young plough-drivers and paid them 1*d* per day before 1450 and 1½*d* after it. Those plough-drivers received a few shillings by working from 15 up to 60 days.⁴³⁷ Secondly, the pay was occasional, though it could be considerable. At Werrington in 1498/9, 24*s* 10*d* was paid for ditching 149 virgates; in 1470/1, 2*s* 6*d* was spent for 20 virgates.⁴³⁸ Similar records were available only in a few occasions. In composing the regular cost of casual labour, these kinds of cost should be excluded, since the tasks were not executed on a regular basis. By counting the costs of labour in the three major seasonal operations, the cost was around 163.38*s* (as much as 8.3% of total expense) at Alciston in 1450/1, 202.125*s* (33.93%) at

⁴³⁵ ESRO, SAS/G44/103; HRO, 11M59/B1/188; DRO, D52/1 Hurdwick 1463/4. The value of the grain delivery was not recorded in the account of expense. The above value means to demonstrate the weight of the salary in comparison with the total expense and has to be read carefully. The value of the grain delivery is calculated of Farmer's price chart; Farmer, 'Prices and wages, 1042-1350', p. 504.

⁴³⁶ '*...loco Johannis Fewer fogatoris iacentis infirmi...*'; SHC, T\PH\lon/2/8/10614.

⁴³⁷ TNA, SC 6/1018/20 - 6/1019/18.

⁴³⁸ DRO, D52/1, Werrington 1470/1, 1498/9.

Ebbesbourne in 1451/2, and 210.48s (32.72%) at Hurdwick in 1463/4.⁴³⁹

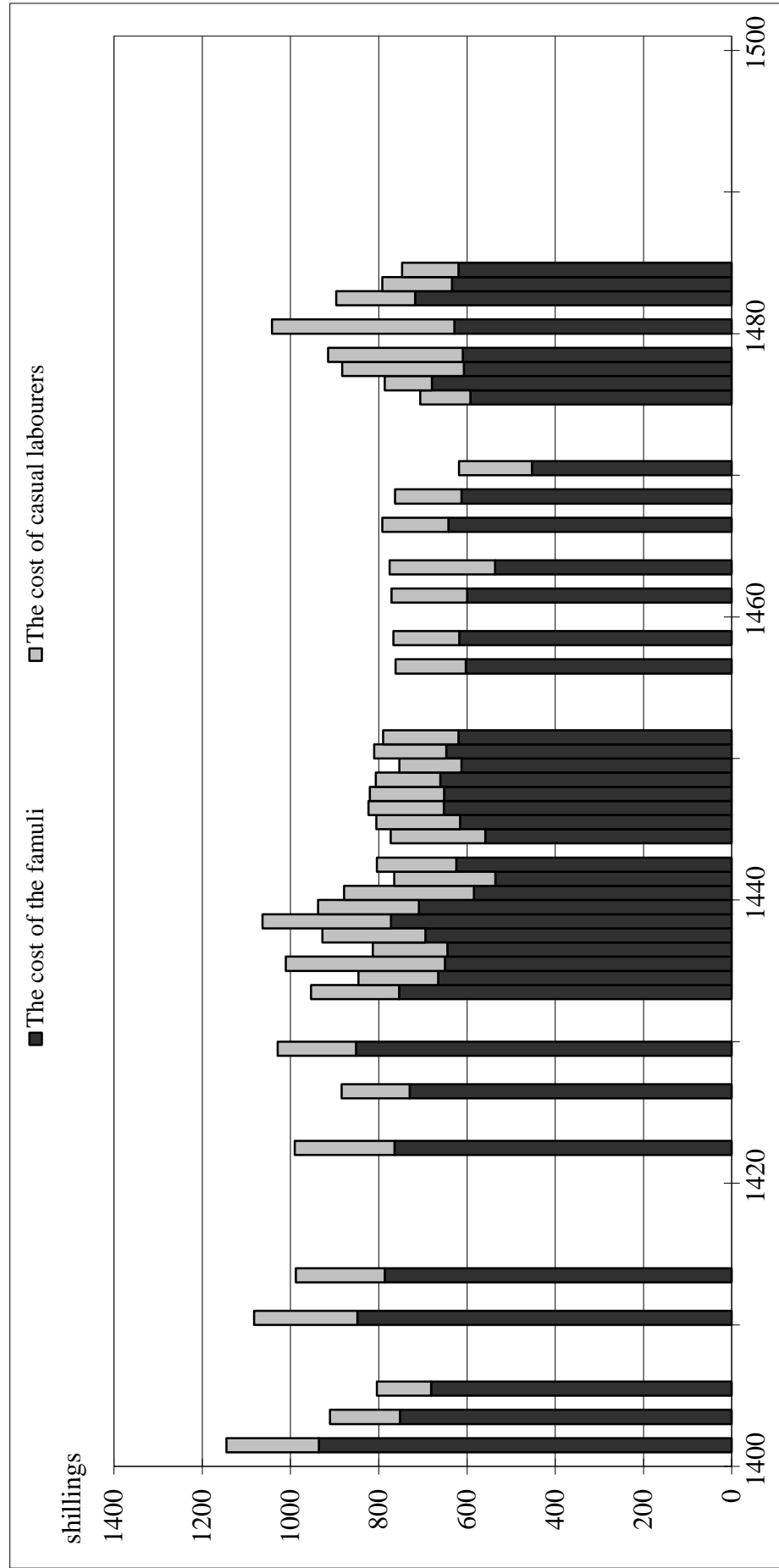
The comparison demonstrates that the *famuli* were financially more significant than casual labourers. At Alciston, the cost of casual labour was only 20% of the cost of the *famuli*. Chart 5.2 illustrates that the contrast was consistent over time. On the manorial demesne at Ebbesbourne, the two sectors look very close in that year, due to the low price level of barley. Over time, the casual labour cost was around 70% of the cost of the *famuli*. The composition of the labour cost is illustrated in Chart 5.3. The difference between the two demesnes is largely a result of the employment of the *famuli* in the harvest. At Alciston, the harvest work was mostly done by the *famuli*; at Ebbesbourne, the reaping and binding tasks were worked by casual labourers, as the *famuli* were performing a support role. The two cases set up the two extremes, between which most cases fall. At Ormesby St Margaret, where both casual labourers and *famuli* were broadly used in the harvest, the casual labour cost was 56.63% of the cost of the *famuli* in 1451/2.⁴⁴⁰ At Pittington in the same year, the cost of casual labour was 27.83% of the cost of the *famuli*.⁴⁴¹ The employment of the labour forces

⁴³⁹ ESRO, SAS/G44/103; HRO, 11M59/B1/188; DRO, D52/1 Hurdwick 1463/4. The threshing labour cost at Alciston was not counted in cash, but in grain. In the year under consideration, the thresher was paid a fifteenth of the threshed grain. The value of the pay is calculated of Farmer's price chart; Farmer, '1350-1500', p. 504.

⁴⁴⁰ The cost of the *famuli* is 253.96s, which includes the salary and the board money that was specially converted into cash this year. The cost of casual labour is 143.83s consisting of the threshing cost, the weeding/mowing cost, and the harvest expense. The harvest expense includes the price of food, which was served to both casual labourers and the *famuli*. Since it is impossible to distinguish the proportion of the food served to each type of labourers, the total amount is used in this instance as a casual labour cost, as overestimating the total casual labour cost. However, as illustrated in the text, this circumvention does not undermine the contrast between the labour costs of the *famuli* and of the casual labourers. TNA, SC 6/940/10.

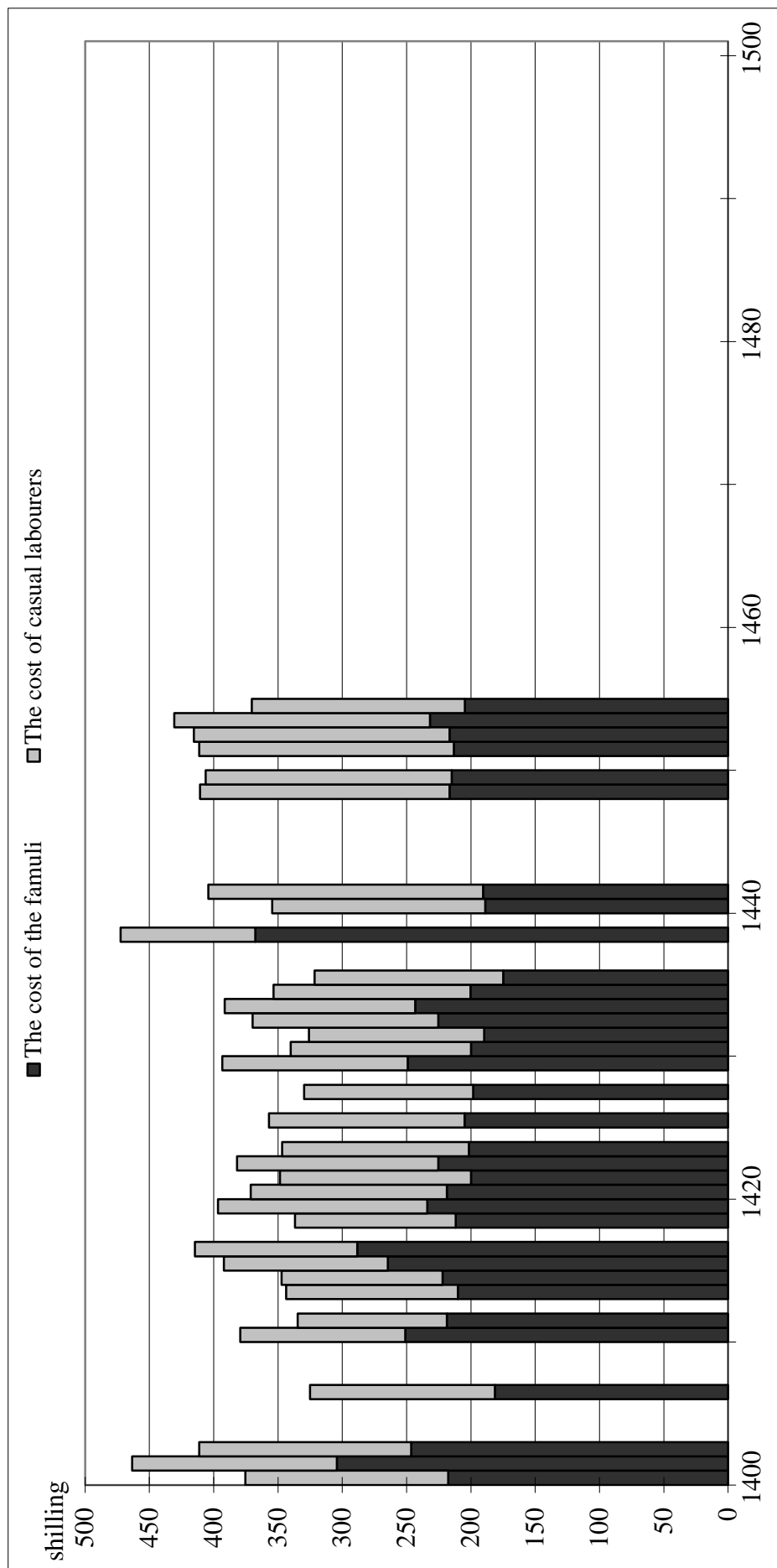
⁴⁴¹ The casual labour cost is 67.11s and the cost of the *famuli* including the value of the grain delivery is 241.15s. DCDM, PAR 1451/2.

Chart 5.2 The comparative cost of hiring the *famuli* and hiring casual labourers on the Alciston manorial demesne, Sussex, 1400-1500



Source: ESRO, SAS/G44/56-139; D. L. Farmer, 'Prices and wages, 1350-1500', in E. Miller (ed.), *The agrarian history of England and Wales*, 3 (Cambridge, 1991), p. 504.

Chart 5.3 The comparative cost of hiring the *famuli* and hiring casual labourers on the Ebbesbourne manorial demesne, Wiltshire, 1400-1500



Sources: HRO, 11M59/B1/150-191; D. L. Farmer, 'Prices and wages, 1350-1500', in E. Miller (ed.), *The agrarian history of England and Wales*, 3 (Cambridge, 1991), p. 504.

in seasonal operations certainly varied on different demesnes, but in our sample the cost of *famuli* always constituted the majority of the labour cost.

From these two aspects, it should be established that the employment of the *famuli* was more important than that of casual labourers in fifteenth-century demesne farming in terms of the labour input and finance. It is also conspicuous that the contrast is sharper in the labour input than in the labour cost. As illustrated in Table 5.3 and in the above discussion, at Alciston, the casual labour input was 11.83% of the labour input of the *famuli*; and the casual labour cost was 20% of the cost of the *famuli*. At Ebbesbourne, the casual labour input was 60% of the input of the *famuli*; and the cost was 70% of the *famuli*. It appears that the *famuli* were cheaper because they worked more and cost less. And it has to be reminded that, whilst the expense is rather direct evidence, many activities of the *famuli* are not documented. That is, the *famuli* did more than it has been illustrated above. A further comparison between the labour input and the labour cost should explain the manager's preference of using the *famuli* to employing casual labourers; and it should reveal a general pattern of labour management that was made due to a clear economic reason.

This result can be observed in the average daily wage received by the *famuli*. In this instance, the estimation is made on the daily average wage rate under the yearly contract V_{AV} to express the special advantage of the *famuli*. In order to calculate V_{AV}

the average yearly work-period used by Karakacili – 250 days – is borrowed.⁴⁴² And $V_{AV} = V / (n \times 250)$, where V = the sum of the salary paid to the *famuli*, including the grain delivery but excluding perks, and n = the total number of *famuli*.⁴⁴³ As for the casual labour wages, the threshing piece wage that was more frequently used is converted into the threshing daily wage by means of the conversion ratios produced by Clark.⁴⁴⁴ The harvest wage rate was broadly counted by the day; and in the cases it was counted by the acre, the value is converted into the daily wage rate using Walter of Henley's suggestion – 2.5 man-days = 1 acre.⁴⁴⁵ Table 5.4 is composed to present the phenomenon that the *famuli* were generally cheaper than casual labourers.

In general, Table 5.4 supports and explains that the *famuli* were the main labour force on the demesne farm, because they were an economic choice. This phenomenon reflects the understanding that contract labour is normally cheaper than casual labour. This rationality was certainly acknowledged by the medieval manager. On the manorial demesne at Ormesby St Margaret, for example, in the harvest the contract of the whole season of four or five weeks was issued. The contract workers were paid less in terms of the daily wage rate, but fairly consistent at 7s or 8s over the season.⁴⁴⁶ On this basis, the demesne manager should reasonably take advantage of the contract

⁴⁴² Karakacili, 'English agrarian labor productivity', pp. 48-49.

⁴⁴³ The value of the grain delivery is calculated of Farmer's chart, see Farmer, '1350-1500', p. 504.

⁴⁴⁴ Clark, 'Productivity growth', p. 426; idem, 'The long march of history', p. 112.

⁴⁴⁵ Lamond, *Husbandry*, pp. xl-xli, 69.

⁴⁴⁶ TNA, SC 6/939/2.

and use the *famuli* as extensively as possible, in order to maximise the outcome of the investment in the contract. This should explain why the *famuli* who bore the titles of ploughman, oxherd, and even shepherd were committed to a range of tasks.

| Table 5.4 Comparison between the daily wage of the <i>famulus</i> and the casual labourer | | | | |
|--|-------|-------------------------|--|--------------------------------------|
| Manorial demesne | V (s) | V _{AV} (d/day) | W _h (d/day) | W _{th} [†] (d/day) |
| <i>c.</i> 1400 | | | | |
| Ebbesbourne (1400/1) | 102.3 | 1.23 | 4 [†] | 2.7-3.2 |
| Lullington (1407/8) | 232.2 | 1.39 | 4 [†] | - |
| Monkton Deverill (1402/3) | 128.6 | 1.54 | 4.4 [†] | 2.7-3.2 |
| Pittington (1405/6) | 187.1 | 1.50 | 4 | 3.7-4.8 |
| <i>c.</i> 1450 | | | | |
| Ebbesbourne (1451/2) | 115.2 | 1.38 | 4 [†] | 2.7-3.2 |
| Lullington (1450/1) | 214.1 | 1.58 | 4 | - |
| Monkton Deverill (1451/2) | 70.4 | 1.69 | 4.8 ^{w†} /3.2 ^{b&o†} | 3.2 |
| Pittington (1450/1) | 202.3 | 2.43 | 4 | 3.7-4 [*] |
| <p>Note: Calculation was conducted by counting in the salary paid to yearly ploughmen, oxherds, and shepherds.</p> <p>V: Cash value of the yearly wage, including estimated values of grain allowance but excluding perks.</p> <p>V_{AV}: Average daily wage (d/day) = V / (n × 250), n = number of workers.</p> <p>W_h: harvest wage rate, excluding the value of meal and other bonus</p> <p>W_{th}: threshing wage rate</p> <p>w: wheat; b: barley; o: oats; m: work by mowing; r: work by reaping</p> <p>*: Data from Elvethall.</p> <p>†: converted value of wage rate per acre divided by 2.5.</p> <p>Sources: HRO, 11M59/B1/150, 188; TNA, SC 6/1025/17, 6/1027/3; SHC, T\PH\lon/2/10/9692, T\PH\lon/2/11/9716; DCDM, PAR 1405/6, 1450/1.</p> | | | | |

5.3 Collaboration between the *famuli* and casual labourers

Regarding collaboration between the two types of labourers, Goldberg has commented that ‘the combination of acute labour shortage, wage inflation, and, from the 1370s, falling grain prices ensured that servant labour was particularly attractive in the years after the Black Death’.⁴⁴⁷ This comment indeed supports our finding that the *famuli* were the economic choice for the demesne manager, but it is contradicted by Chart 5.2 and 5.3 that illustrate a steady composition of the labour cost over time. There was no apparently falling trend in the cost of casual labour despite the reported high wage rates that should have urged the employer to use cheap *famuli*; conversely, the falling price level of barley slightly decreased the cash value of the salary package of the Ebbesbourne *famuli*. As the incentive of hiring the *famuli* was there, why did the manager keep employing the expensive casual labourers? This puzzle may be approached from two aspects: firstly, why did the demesne hire casual labourers; secondly, why did not the demesne employ more *famuli* to replace casual labourers.

Firstly, given that the manager used the *famuli* as extensively as possible, casual labourers were only employed to take on the vacancies left by them. The *famuli* were normally given designated responsibilities like ploughing and shepherding; and their work had the busy seasons and the slack seasons like other farming operations. It has been illustrated that the *famuli* were busy in the two sowing seasons; some might be

⁴⁴⁷ Goldberg, ‘What was a servant’, pp. 18-19.

busy in the summer for fallow-ploughing. To a great extent, this was a stiff schedule, because the crops needed time to mature before the coming August. Casual labourers were demanded in the summer for weeding and mowing; and casual labourers were especially needed in the autumn for threshing grains for the seed and for malt, when the *famuli* were ploughing. Changes in this schedule happened in accordance with the cropping system. The extensive cultivation of barley in Norfolk, for example, should require intensified ploughing labour in the spring; as the shortened winter ploughing allowed wider participation of *famuli* in the harvest and threshing, like at Ormesby St Margaret. This arrangement was critical because malting was a major industry in this area and a huge amount of barley had to be handed in to the malt-house in November.⁴⁴⁸ Growing legumes and pasturing sheep on the fallow reduced the fallow-ploughing.⁴⁴⁹ Or if the soil was so fertile, like at Alciston and Lullington, it did not demand intense attendance and the *famuli* might be able to do other tasks.⁴⁵⁰ And the *famuli* on these two demesnes were also a regular labour force in threshing. Frankly, since the labour market was uneven during the year, there were always surges in demand for labour. When the local farming schedule allowed the *famuli* to cope with the surge, casual labourers were not employed, like at Alciston in Chart 5.2; otherwise, a composition of the labour cost like Ebbesbourne in Chart 5.3 happened.

⁴⁴⁸ T. Tusser and W. Mavor (ed.), *Five hundred points of good husbandry* (London, 1812), pp. 46-47, 50-51.

⁴⁴⁹ Campbell, *English seigniorial agriculture*, p. 276; T. Davis, *General view of agriculture of Wiltshire* (London, 1881), pp. 55-56.

⁴⁵⁰ Brandon, 'Demesne arable farming', pp. 125-126; Campbell, *English seigniorial agriculture*, pp. 276, 284.

Secondly, granted that the *famuli* were hired as an economic choice, certainly the manager would not issue a contract when there was not enough work available for the prospective worker. The odd demands were satisfied by short-term contracts or casual labourers, rather than by the yearly contract. At Ebbesbourne, for example, before c. 1441, labour service ploughed about 12 acres. After c. 1446, the labour service were abandoned and a casual ploughman was hired to plough up to 30 acres on a regular basis, whilst a new yearly contract was never issued.⁴⁵¹ On the glebe of Longbridge Deverill, in 1419 a customary ploughman that was shared with the manorial demesne was released of duty; on his behalf a part-time plough-driver was hired to cope with the work on the glebe farm alone.⁴⁵² At Pittington 1405/6, 21 man-days were bought because the *famuli* were diverted to carriage.⁴⁵³ Additionally, when the demand was really low, but a full-time worker was needed, two affiliated estates might share the *famulus*, like the sharing between the glebe and the manorial demesne of Longbridge Deverill. The two estates shared the carter, the ploughman, and the oxherd at first, until the ploughman left. As the importance of cultivation was reducing on the glebe, the *famuli* that ploughed on the manorial demesne, worked as the carter for the glebe to collect tithes. The *famuli* shared between them received a half of the salary from

⁴⁵¹ There is a gap in Winchester Pipe Rolls between 1441 and 1446.

⁴⁵² The person receive 6s 8d, which was a half of the ordinary salary, whilst he was given full grain delivery. This arrangement is most likely a part-time arrangement, let along the sown acreage of 45.5 in that year. SHC, T\PH\lon/2/8/9617.

⁴⁵³ DCDM, PAR 1405/6.

each.⁴⁵⁴ It is reasonable that the yearly contract worth 30s-40s, or even a half-year contract, was not suitable for this kind of use.

The financial efficiency of employing the *famulus* relied on how much work the *famulus* did. The financial advantage of the *famulus* shown in Table 5.4 would reduce, when the number of work-days reduced. When it reduced to an extent, the daily wage of the *famulus* might exceed the daily wage rate of a casual labourer. For this reason, the *famulus* could not be hired at the manager's free will and many tasks had to be handed to casual labourers because they were the economic choice in that instance. As in the harvest, which lasted for one or two months, the rather high demand for labour could not be reasonably satisfied by the yearly contract, but rather by the seasonal contract or by casual labourers. The documents from ordinary manorial demesnes do not preserve the source material needed for proving this argument due to the simple accounting practice, but the account from the small manorial demesne at Monkton Deverill provides the necessary information that will illustrate that, firstly, the *famuli* worked extensively in seasonal operations; secondly, they worked in collaboration with casual labourers; thirdly, casual labourers might be an economic choice; fourthly, the hire of *famuli* was an economic decision.

An overview of labour arrangements at Monkton Deverill suggests that it was

⁴⁵⁴ SHC, T\PH\lon/2/8/9605-9617, 9636, 9843-9853, 9855-9861, 9864, 9868, 9884, 10611, 10614, 10664, 10706-7; T\PH\lon/2/9/9814, 9854, 9862-3, 9865.

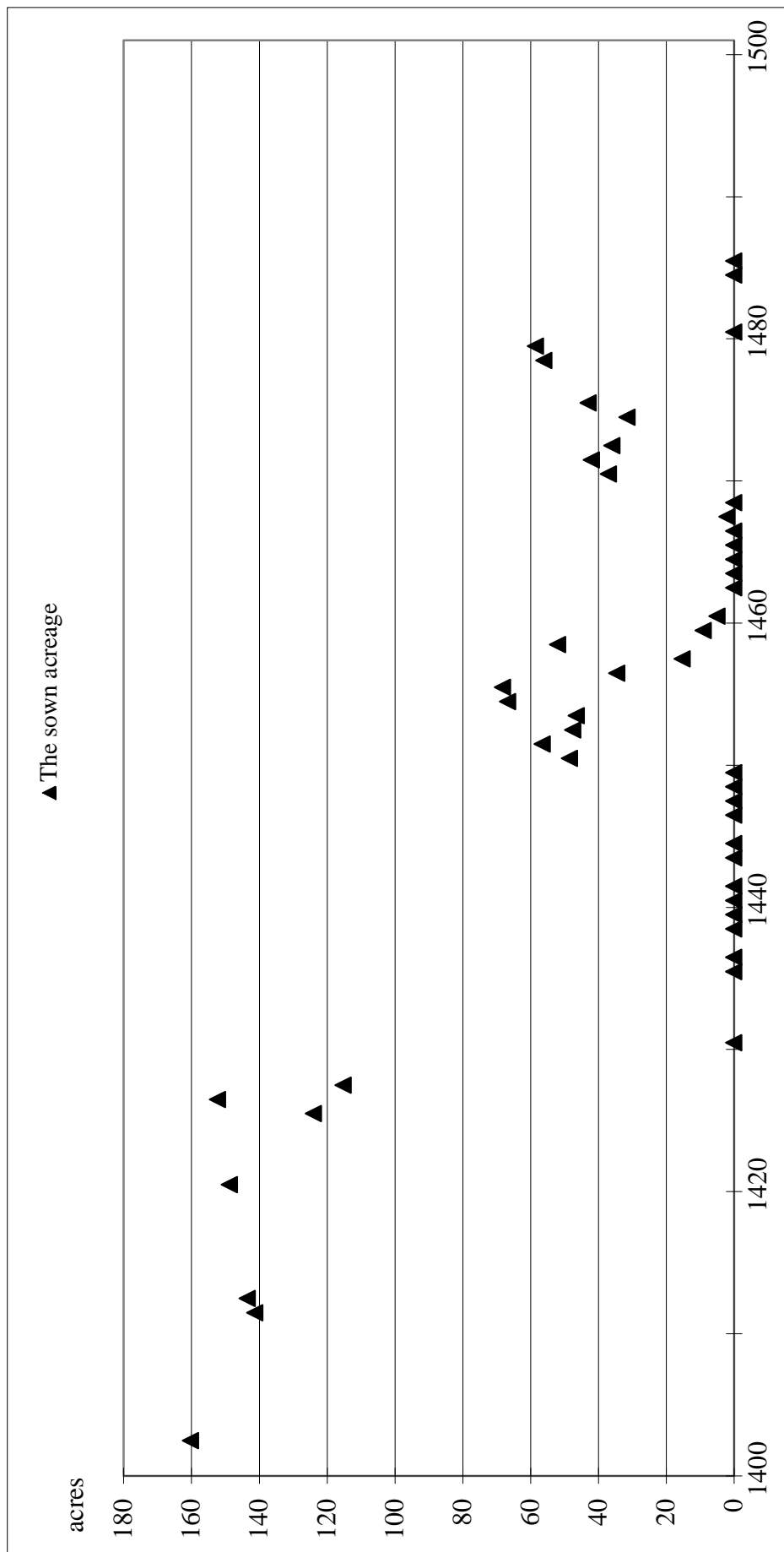
like an ordinary demesne until 1427 and changes happened in the 1450s when cultivation was restored on the demesne, as illustrated in Chart 5.4. In 1420/1, the sale of grain produced £4 1s 8d and the sale of cattle contributed £9 11s. The rent was worth £8 16s 8½d altogether. These made up a gross income of £29 18s 2¾d. In order to run this demesne, in 1420/1 one carter, two ploughmen, one oxherd, and three shepherds were hired.⁴⁵⁵ When cultivation was restarted in 1450/1, about the same sheep flock (1000) was maintained and three shepherds were hired, but only two acremen (*akremanni*), who were required to perform a range of tasks, were recruited for the year to attend a sown field of 48.5 acres. This arrangement lasted shortly into 1455/6. In the following year the two acremen and one shepherd were dismissed, and casual labourers took over the work originally done by the *famuli*. Cultivation ceased again in 1460-1470. In 1470, the production and the employment of acremen were restored in the same manner as in 1450/1.

The small manorial demesne apparently did not have enough ploughing work to properly occupy the *famuli*. In 1450/1, the sown acreage was 48½ acres; in 1451/2, it was 56½; in 1452/3, 47½; and in 1453/4, 46½. The sown field was increased to 66¾ acres and 68¼ acres in 1454/5 and 1455/6.⁴⁵⁶ It explains the hire of the multi-tasked post of the acreman that combined the ploughman, the carter, and the casual labourer.

⁴⁵⁵ SHC, T\PH\lon/2/10/9880.

⁴⁵⁶ SHC, T\PH\lon/2/11/9715-9719, 9813.

Chart 5.4 The sown acreage on the Monkton Deverill manorial demesne, Wiltshire, 1400-1500



Sources: SHC, T\PH\lon/2/10/9692-9695, 9697-9705, 9720, 9822, 9873, 9880-1, 10625, 10721-2; T\PH\lon/2/11/9707-9719, 9793-9804, 9813, 9827, 9834, 9882-3, 9998-10000, 10626, 10717-10719, 10726.

Two were hired to work full-time in 1450/1 and were paid 16s each for the year with full grain deliveries. They could man one plough-team, but even one plough-team was a bit too much for this farm.⁴⁵⁷ Therefore, the acremen made a visible contribution in seasonal operations. In the harvest, for example, in the summer of 1452, 13 acres, or 22.6% of the work, were done by them. Table 5.5 illustrates that they threshed about a half of the grain produce and sometimes the great majority. Even in 1454/5 and 1455/6, when the sown acreage reached the national average, the *famuli* still took part in the harvest and, especially, threshing. In spite of their active participation in seasonal operations, casual labourers were still used in haymaking, threshing, and the harvest. After 1470, when the sown acreage was smaller than this period, the situation remained and casual labourers were still hired to work with the *famuli*.⁴⁵⁸

The same arrangement shown in Table 5.5 did not happen before 1427/8, when two plough-teams were maintained to take care of the sown field that was consistently over 140 acres. Each team should plough over 70 acres for roughly 210 days in the year. Moreover, besides the oxherd and, possibly, the ploughing supervisor, two of the four ploughing staffs were part-time *famuli*, e.g. Ricard Felippes and John Moor who had to work on their own holdings as recognised by Farmer. The activities of the four *famuli* in seasonal operations are laid bare. In 1420/1, they threshed 6qrs of *brot* and

⁴⁵⁷ When arable production was restarted in 1450/1, three shepherds and two acremen were hired besides the overseer. Among those persons, only acremen were regular arable workers.

⁴⁵⁸ The sown acreage in 1470/1 was 37; 1471/2, 42; 1472/3, 36; 1474/5, 31.5; 1475/6, 43; 1478/9, 56; 1479/80, 58.5, see SHC, T\PH\lon/2/11/9802-9804, 10000, 10626, 10718, 10726.

five pairs of gloves were issued to the reeve, who was not on the payroll, and to four other unidentified workers.⁴⁵⁹ During this period the threshing was regularly worked by casual labourers and the harvest was undertaken by both casual labourers and labour service.⁴⁶⁰ Thus, Table 5.5 illustrates an extensive use of the *famuli* on this demesne due to the small workload of their designated operation.

| Table 5.5 The work distribution in seasonal operations at Monkton Deverill | | | | | |
|--|-------------------------------------|---------------------------------|--------------------------------|------------------------------------|---------------------------------|
| Harvest | 1451/2 | 1452/3 | 1453/4 | 1454/5 | 1455/6 |
| By casual labourers | w: 11.5 acres b/d/o: 28.5 acres | w: 2 acres b/d/o: 17.5 acres | w: 12 acres b/d/o: 26 acres | w: 25 acres b/d/o: 41¾ acres | w: 16 acres b/d/o: 39¾ acres |
| By the <i>famuli</i> | b/d/o: 13 acres | w: 2 acres b/d/o: 10 acres | d: 0.5 acres | n/a | w: 3.5 acres b/d/o: 9 acres |
| Sold in the field | w: 4½ acres | w: 5 acres b/d/o: 11 acres | w: 3 acres b/d/o: 5 acres | n/a | n/a |
| Threshing | | | | | |
| By casual labourers | b/d: 26 qrs | w: 11 qrs b/o: 31 qrs 6 bu | w: 6 qrs b: 2 qrs | w: 1 qrs | w: 14 qrs b/d: 8 qrs 7 bu |
| By the <i>famuli</i> | w: 3 qrs 6 bu b/d/o: 30 qrs 4 bu | w: 2 qrs b/o: 29 qrs | b: 22 qrs 4 bu | w: 15 qrs 5 bu b/o: 30 qrs 1 bu | b/d/o: 52 qrs 5½ bu |

Note: w: wheat; b: barley; d: drage; o: oats.

Sources: SHC, T\PH\lon/2/10/9692-9695, 9697-9705, 9720, 9822, 9873, 9880-1, 10625, 10721-2; T\PH\lon/2/11/9707-9719, 9793-9804, 9813, 9827, 9834, 9882-3, 9998-10000, 10626, 10717-10719, 10726.

This arrangement changed sharply after 1455/6. In 1456/7 the sown acreage was even smaller and the cropping field was reduced to 34.5 acres. The two acremen were dismissed for the apparent reason that their hire was no longer economic. In 1456-1461, all arable operations were done by casual labourers. The dismissal of the

⁴⁵⁹ SHC, T\PH\lon/2/10/9880; Farmer, 'The *famuli*', pp. 228-229.

⁴⁶⁰ SHC, T\PH\lon/2/10/9692, 9694, 9695, 9699, 9880, 9881, 10722.

acremen was an economic decision. In this instance, we use R. C. Allen's method of labour cost per acre to explain the economic reason. Allen uses labour-cost-per-acre to examine the combined employment of women and boys, and of skilled workers.⁴⁶¹ In this research, this method can be used to distinguish if the *famuli* were economically employed. In eq. 5.1, V_{acre} , *i.e.* labour-cost-per-acre, is better when it is smaller, representative of the labour cost spent on cultivating each acre. When the sown acreage A is too small and W_f is fixed, V_{acre} shall increase; whilst W_c/A is mostly fixed because casual labour was hired in proportion to the sown acreage.

$$\frac{W_f + W_c}{A} = V_{acre} \quad \text{or} \quad \frac{W_f}{A} + \frac{W_c}{A} = V_{acre} \quad (\text{eq. 5.1})$$

Notation

W_f : the cost of the *famuli*

W_c : the cost of casual labour

A : the sown acreage

V_{acre} : the cost of labour per acre

At this point the comparative labour cost between the *famuli* and casual labour can be made. Table 5.6 shows that, in spite of the dismissal of the *famuli*, the labour cost per acre was only slightly higher in the latter 1450s than in the first half of the 1450s. The demesne spent 34s 9d in 1456/7, 19s 8d in 1457/8, and 58s 1½d in 1458/9

⁴⁶¹ R. C. Allen, 'The growth of labor productivity in early modern English agriculture', *Explorations in Economic History*, 25 (1988), pp. 131-132, 135-137.

on ploughing and fallow-ploughing. If the two acremen from the previous period were still employed, their salary would be worth between 700*d* and 900*d* depending on the price level of barley and would considerably increase V_{acre} .⁴⁶² Apparently, when the sown acreage was too small, the hire of the acremen was uneconomic. The manager made an economic decision to replace the *famuli* with casual labourers.

| Table 5.6 The cost of labour per acre on the Monkton Deverill demesne 1451-1460 | | | | | |
|--|---------|--------|---------|---------|---------|
| 1450-1455 | | | | | |
| | 1451/2 | 1452/3 | 1453/4 | 1454/5 | 1455/6 |
| Casual labour cost (<i>d</i>) W_c | 582 | 393.5 | 421 | 812.5 | 814.25 |
| <i>Famuli</i> labour cost (<i>d</i>) W_f | 871.8 | 888 | 926.8 | 744.6 | 843.84 |
| Sum (<i>d</i>) | 1453.8 | 1281.5 | 1347.76 | 1557.1 | 1658.09 |
| Sown acreage, A | 56.5 | 47.5 | 46.5 | 66.75 | 68.25 |
| V_{acre} (<i>d</i>) | 25.73 | 26.98 | 28.98 | 23.33 | 24.29 |
| 1456-1460 | | | | | |
| | 1456/7 | 1457/8 | 1458/9 | 1459/60 | 1460/1 |
| Casual labour cost (<i>d</i>) W_c | 1114.25 | 627.25 | 942.5 | 300 | 237.5 |
| <i>Famuli</i> labour cost (<i>d</i>) W_f | - | - | - | - | - |
| Sum (<i>d</i>) | 1114.25 | 627.25 | 942.5 | 300 | 237.5 |
| Sown acreage, A | 34.5 | 15.25 | 52 | 9 | 5 |
| V_{acre} (<i>d</i>) | 32.3 | 41.13 | 18.13 | 33.33 | 47.5 |
| Source: SHC, T\PH\lon/2/11/9716, 9717, 9718, 9719, 9793, 9794, 9795, 9813, 9998. | | | | | |

Before 1427, this demesne was as large as Pittington in Durham. Supposedly, the value of V_{acre} would be lower because the *famuli* were more fully employed in the ploughing task. In 1420/1, two full-time and two part-time *famuli* were hired. They

⁴⁶² The average wage rate is calculated with Farmer's price chart; Farmer, 'Prices and wages, 1350-1500', pp. 504-505.

were paid 39s 4d by cash and 15qrs of wheat and barley. The total value of the salary was about 20% higher than the 1451 salary package, when the cropping field was three times as large. Positively, Table 5.7 presents that V_{acre} in this period was slightly lower than the 1450-5 level except the case of 1427/8, when cultivation ceased. A possible explanation of why V_{acre} was not considerably lower is that the involvement of the *famuli* in seasonal operations was minimised. In the first half of the 1450s, the cost of casual labour was around 40% of the total cost of labour, indicating the limited use of it. Before 1427, almost all the harvest and threshing tasks were done by casual labourers, since the *famuli* were busier. Even so, a lower value of V_{acre} is acquired to support my analysis that the *famuli* were only more economic than casual labourers when they were properly employed; otherwise, the hire of them would only increase the burden on the demesne.

Table 5.7 The cost of labour per acre on the Monkton Deverill demesne 1400-1427

| | 1402/3 | 1411/2 | 1420/1 | 1427/8 |
|--|---------|---------|---------|---------|
| Casual labour cost (<i>d</i>) W_c | 2476 | 2940.25 | 2325.75 | 603.25 |
| <i>Famuli</i> labour cost (<i>d</i>) W_f | 1094.16 | 969.6 | 1274 | 901 |
| Sum (<i>d</i>) | 3570.16 | 3909.85 | 3599.75 | 1504.25 |
| Sown acreage, A | 160.25 | 141.25 | 148.75 | 115.25 |
| V_{acre} (<i>d</i>) | 22.28 | 27.68 | 24.2 | 13.05 |

Source: SHC, T\PH\lon/2/10/9692, 9694, 9880, 10722.

Overall, in theory, the advantage of the hire of casual labourers and the *famuli* was decided by the economic efficiency of the contract. Apart from the limitations of the farming cycle, the demesne manager hired casual labourers most likely because it was more economic than hiring a *famulus*. These limits may explain why the number of the *famuli* was usually steady when the financial advantage of hiring the *famuli* was clear. For example, at Alciston, in 1449-1485, the number of ploughmen remained at eight in spite of the fluctuating sown acreage.⁴⁶³ At Ebbesbourne, two ploughmen, one oxherd, and one carter were always hired.⁴⁶⁴ There was, however, the possibility of a structural change. At Pittington after 1418, the *famuli* took over most operations except the harvest, in which they were heavily involved. As a result, in 1419/20, the threshing cost was only 5s 6d, in sharp contrast to 34s 8d in the previous year. The harvest labour cost reduced from £6 9s to 70s 6d.⁴⁶⁵ The change might be related to the cropping system. In 1419/20, the acreage of legumes increased to 32 acres; when the acreage of wheat reduced from around 50 acres to 44 and barley reduced from around 40 acres to 27 acres.⁴⁶⁶ This should reduce the fallow-ploughing and allow work in the summer operations; and the smaller wheat field might permit the *famuli* to take on threshing. Even so, the need for casual labour remained, as proved by the demand in the harvest. Economically and naturally, casual labourers and the *famuli*

⁴⁶³ ESRO, SAS/G44/102-131.

⁴⁶⁴ HRO, 11M59/B1/150-191.

⁴⁶⁵ DCDM, PAR 1418/9-19/20.

⁴⁶⁶ DCDM, PAR 1419/20

had to exist together as a complete labour system on the manorial demesne.

5.4 Conclusion

In conclusion, during the fifteenth century the employment of the *famulus* on the manorial demesne developed the characteristics which made him close to the early modern counterpart. Firstly, the *famulus* was a permanent worker most likely working full-time. He was mostly commissioned to herding or ploughing, but was not limited to it. As demonstrated above, the involvement of the *famulus* in seasonal operations is considerable, even though his principal responsibility occupied most of his time in the year. They were the main labour force in comparison with casual labours, like on the early modern farm reported by T. M. Devine and A. Howkins.⁴⁶⁷ Moreover, evidence suggests that the fifteenth-century *famulus* might be ‘dependent on the employer’. Evidence from Ormesby St Margaret indicates that the *famuli* did not seem to have their families as they ate regularly at the working place.⁴⁶⁸ Some of them were probably life-cycle servants, moving on to the next stage of the career of the farm worker after the service. For example, in the early fifteenth century, several casual labourers, e.g. John Carter, Robert Bell, and Thomas Brown, worked on the Pittington manorial demesne had been the *famuli* on that demesne.⁴⁶⁹ For another example, in

⁴⁶⁷ Howkins, ‘Peasants, servants and labourers’, pp. 57-58; Devine, ‘Scottish farm service’, pp. 1-2.

⁴⁶⁸ TNA, SC 6/939/2, 3, 4, 8A, 10, SC 6/940/5, 6.

⁴⁶⁹ DCDM, PAR 1392-1409.

Badbury, Wiltshire, sometime before 1357, Gibbes worked for John atte Steorte as a *famulus*. In 1357, Gibbes was reported to have paid an entry fine of £10 and become a yardlander.⁴⁷⁰ It seems that the *famulus* was a predecessor of the early modern farm servant, but the lack of detailed information of his identity and his connection with the employer requests us to be conservative about the similarities between the two.

Even so, the pattern of employment confirms that the *famuli* were the permanent labour force on the manorial demesne. On this basis the economic role of this post is clear. As the permanent labour force, the *famuli* were supposed to do all sorts of tasks whenever they were available. Their working schedule followed the farming schedule, going through the busy seasons, e.g. the ploughing seasons, and the slack seasons, e.g. the periods outside their principal responsibilities. Reasonably, their labour power was available in the slack seasons and could be diverted to other operations like threshing and the harvest. Reasonably, the *famuli* were more likely to take part in the operations outside their principal responsibilities when the number of them was large, like on the Alciston demesne. From this aspect of view, casual labourers were hired to satisfy the demand that the *famuli* could not cope with. The employer should be keen to maintain this type of labour force.

Moreover, the cost of the *famuli* was significantly larger than the cost of casual

⁴⁷⁰ M. Müller, 'A divided class? Peasants and peasant communities in later medieval England', *Past & Present Supplement* 2 (2007), p. 130. Regarding the early life-cycle farm servant, see, Kussmaul, *Servants in husbandry*, pp. 31-34, 70-85; S. Caunce, 'Twentieth-century farm servants: the horselads of the East Riding of Yorkshire', *Agricultural History Review*, 39 (1991), pp. 143; Howkins, 'Peasants, servants and labourers', p. 58.

labourers when the value of grain delivery was included; and it was still large when grain delivery was excluded. However, this heavy cost accounts for a type of labour that was potentially cheaper than casual labour. It has been demonstrated that as long as the employer was able to provide the *famuli* sufficient work to do, he could keep the practical cost of them much lower than hiring casual labourers in their place. The implication is that, on the large farm where many *famuli* were employed, the practical cost of the *famuli* would be much lower than on a small farm where a few *famuli* were used. Even better, as at Alciston, when their number was large, many of them tended to take part in the operations that usually required casual labourers on smaller farms. Hence the overall cost of labour and the reliance on expansive casual labourers was relatively reduced. This implies a possibility of capitalist management of labour, as happened latter on in the enclosure movement.

From the employee's point of view, the *famulus* and the casual labourer stand for two rather different types of post. On the one hand, the yearly contract of the *famulus* guaranteed the labourer a secure livelihood; on the other, the lower daily average wage received by the *famulus* than the one received by the casual labourer made the *famulus* a disadvantaged employment. This explains why during labour shortage, as in the period under consideration, when job opportunities were relatively abundant in the

casual sector, labourers tended to turn down the long-term contract for casual hire.⁴⁷¹

By increasing the salary, the employer would secure the permanent labour force, but the average daily wage rate was still low as illustrated in Table 5.4. It seems that the salary, though low, was considered acceptable by some labourers. The implication is that, although the wage rates were high in the casual sector, not every casual labourer could fully benefit in that economy, because of the varying seasonal demand that was mostly concentrated in the summer. Those who could not secure casual opportunities in the slack seasons could not earn proper incomes. Therefore, servanthood could be a reasonable choice.

⁴⁷¹ C. Dyer, *Lords and peasants in a changing society* (Cambridge, 1980), pp. 142-143; C. Dyer, and S. A. C. Penn, 'Wages and earnings in late medieval England: evidence from the enforcement of the Labour Laws', *Economic History Review*, 2nd ser., 43 (1990), pp. 366-372; J. Hatcher, 'England in the aftermath of the Black Death', *Past & Present*, 144 (1994), p. 28.

Chapter 6 Divergent movements in fifteenth-century English agricultural wages

The late medieval labour shortage boosted the wage rate, which is expressed by the existing wage evidence, to its summit in the middle of the fifteenth century, and to a level that is unparalleled until the nineteenth century. It has been established that the high wage rate considerably increased the agricultural labourer's living standard and that it undermined demesne farming by raising the financial burden of hiring.⁴⁷² This framework is, however, incomplete because of the omission of the salary of the other type of paid labourer – the *famulus*.

The existing wage evidence composed of casual wage rates provides a strong basis for the characterisation of 'the golden age of the English labourer' given by J. E. Thorold Rogers, because 'At no time were wages, relatively speaking, so high, and at no time was food so cheap'.⁴⁷³ This evidential basis has been improved by many historians for over a century.⁴⁷⁴ M. M. Postan was able to use the wage evidence to demonstrate the late medieval demographic changes by means of the purchasing power of the daily wage. The idea is that, because resources shrank less than

⁴⁷² E. A. Kosminsky, 'The evolution of feudal rent in England from the 11th to the 15th centuries', *Past and Present*, 7 (1955), pp. 27-28; A. R. Bridbury, 'The Black Death', *Economic History Review*, 2nd ser., 26 (1973), pp. 583-584.

⁴⁷³ J. E. Thorold Rogers, *Six centuries of work and wages: the history of English labour* (London, 1886), p. 325.

⁴⁷⁴ J. E. Thorold Rogers, *A history of agriculture and prices in England*, v. 1-7 (1866-1902); W. Beveridge, 'Wages in the Winchester manors', *Economic History Review*, 2nd ser., 7 (1936), pp. 22-43; idem, 'Westminster wages in the manorial era', *Economic History Review*, 2nd ser., 8 (1955), pp. 18-35; D. L. Farmer, 'Prices and wages, 1042-1350', in H. E. Hallam (ed.), *The agrarian history of England and Wales*, vol. 2 (Cambridge, 1988), pp. 715-817; idem, 'Prices and wages, 1350-1500', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 431-525.

population in the fourteenth and fifteenth centuries, each individual's share of available resources increased. The rising purchasing power of the wage since *c.* 1300 represents the increased share during the period in question, which was one of depopulation.⁴⁷⁵ The framework has enabled a simple and effective approach to the post-Black Death economy when the said phenomenon was observed in manorial accounts throughout the country.⁴⁷⁶ This framework allows a broad understanding of English economic history from the late twelfth century to the modern period.⁴⁷⁷

However, over the fifteenth century, the wage evidence presents a situation that is difficult to interpret. Chart 6.1, composed of D. Farmer's consumer price indices and agricultural wage rates, illustrates that, after a surge in the 1370s, the money wage rate remains steady at a high ground till the end of the series.⁴⁷⁸ Whilst details of the aggregate indices may be distorted by discontinuities in raw wage data, the steadiness in money wage rates is stark in the original documents, where only in a few occasions temporary shifts in money wage rates are observed. Certainly, it may be argued that repeated returns of plague were localised in this century and did not cause national mortality as the fourteenth-century ones had done. The trend in real wage rates in

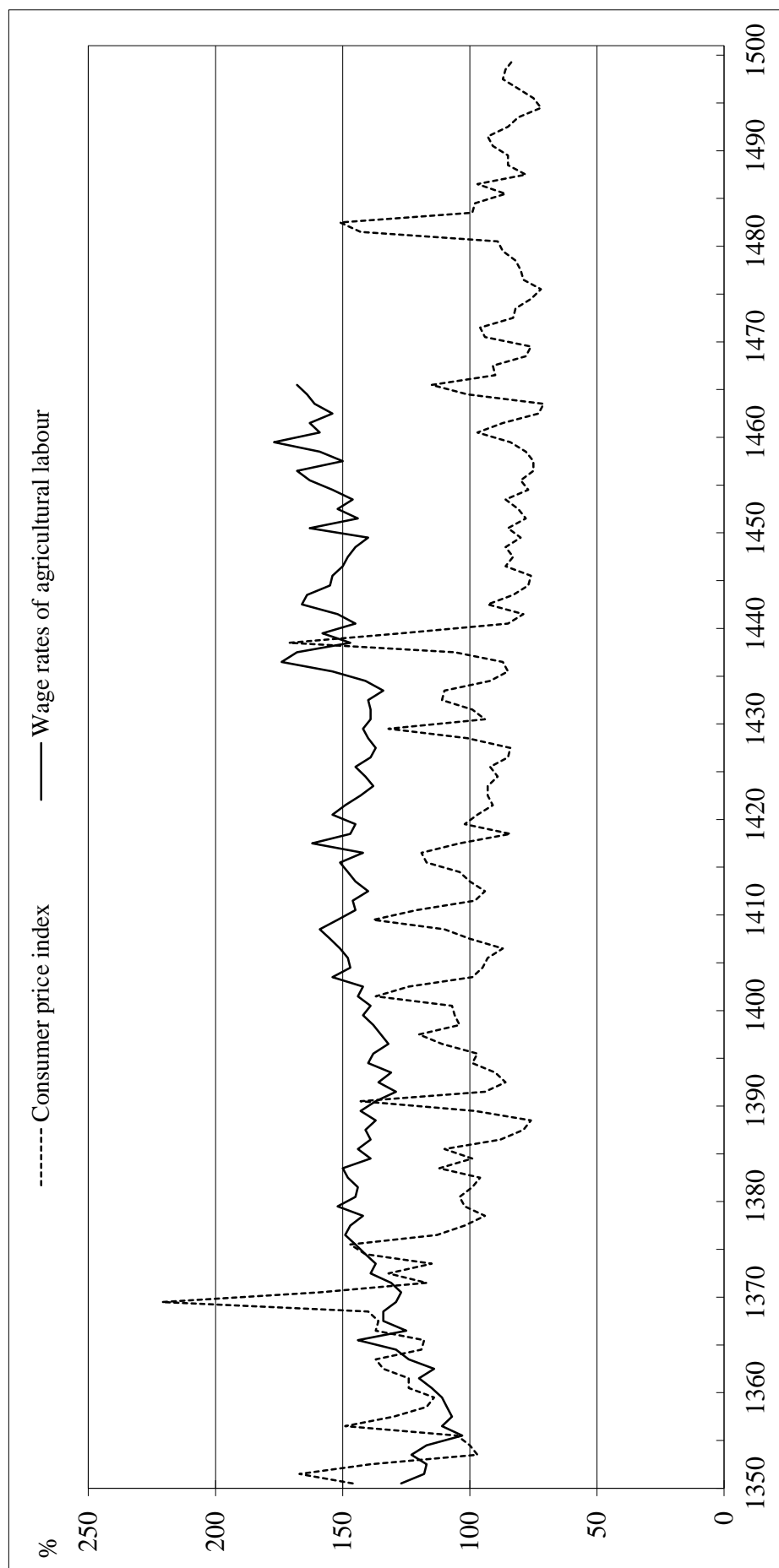
⁴⁷⁵ M. M. Postan, 'Some economic evidence of declining population in the later middle ages', *Economic History Review*, 2nd ser., 2 (1950), pp. 221-246.

⁴⁷⁶ J. Hatcher, 'England in the aftermath of the Black Death', *Past & Present*, 144 (1994), pp. 3-35.

⁴⁷⁷ G. Clark, 'The long march of history: farm wages, population, and economic growth, England 1209-1869', *Economic History Review*, 2nd ser., 60 (2007), pp. 97-135.

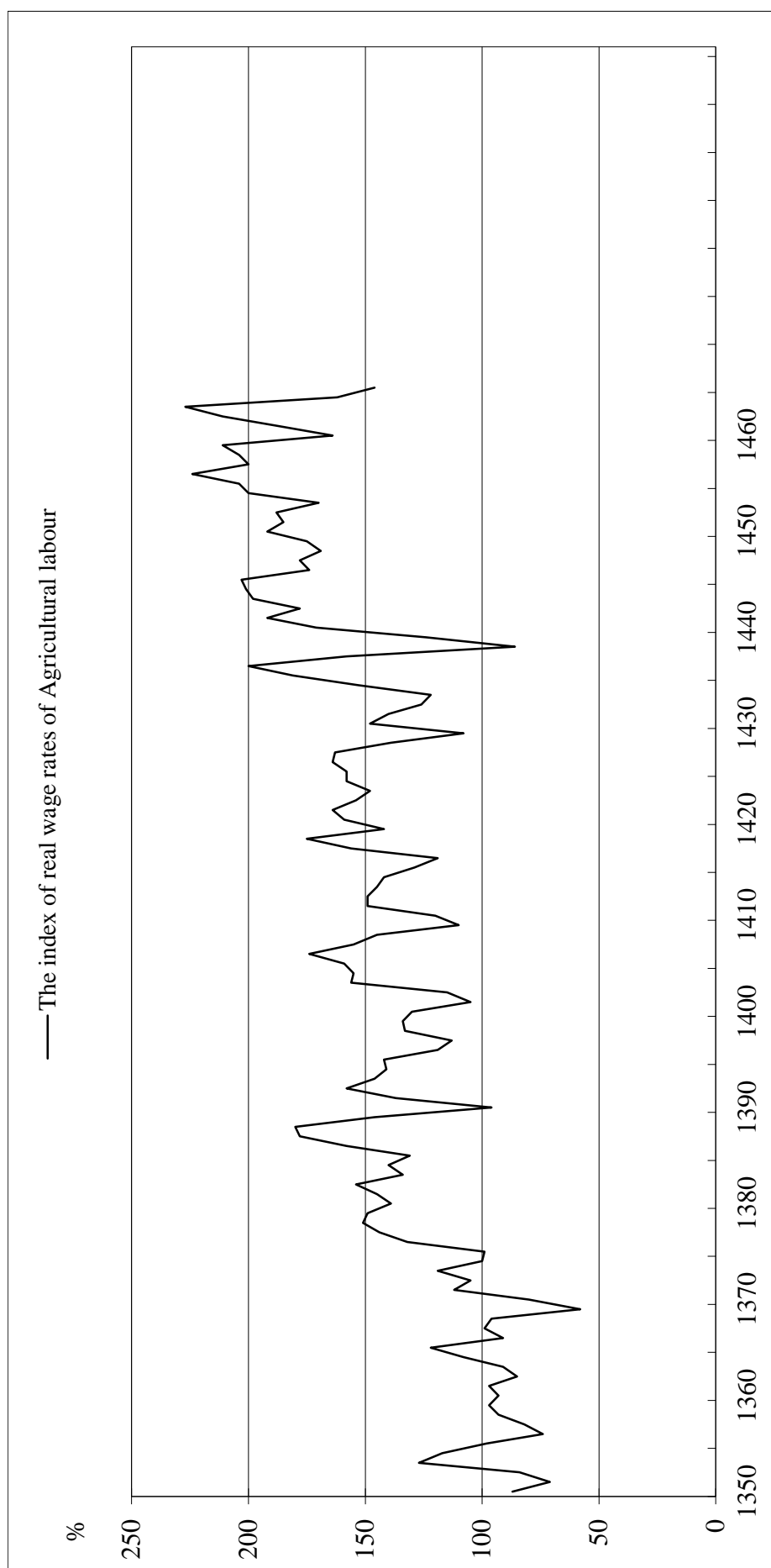
⁴⁷⁸ In this study, the term 'money wage' is not considered the same as 'nominal wage'. In this period the wage was usually a package that consisted of both cash and payments in kind. The value of payments in kind is hard to calculate. Therefore, the nominal wage rate is hard to come by. On the other hand, data of payments by cash are easy to assemble. The term 'money wage' is used to describe the cash part of the wage package. In the following discussion I will address that the money wage data used in this study are carefully extracted from accounts where labourers were paid only by cash.

Chart 6.1 D. Farmer's consumer price index and agricultural wage rate index, 1350-1500



Source: D. L. Farmer, 'Prices and wages, 1350-1500', in E. Miller (ed.), *The agrarian history of England and Wales*, 3 (Cambridge, 1991), pp. 516-518.

Chart 6.2 The index of real wage rates calculated of D. Farmer's wage and price series



D. Farmer, 'Prices and wages, 1350-1500', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 520-524.

Chart 6.2 suggests otherwise. The real wage rate increased sharply in the 1370s and 1380s; and remained high but stable until c. 1430; and rose again thereafter.⁴⁷⁹ The rising trend in real wage rates suggests that the labour market was biased to labourers, implying of continued depopulation.⁴⁸⁰ During a period of depopulation, there should be a shear movement between the money wage rate and the price level of grain, as happened in the 1370s and 1380s in Chart 6.1, because of the short supply of labour and the low demand for grain. But, as far as the evidence indicates, only a falling trend in the price level of grain is observable. The steadiness in money wage rates poses a curious situation: why did the shear movement not appear?

This curious trend in money wage rates has inspired discussion. It might be a result of wage regulations, though the wage regulations are believed to have been inefficient.⁴⁸¹ The monetarist historians suggest that bullion shortage might drag the price level to rock-bottom and prevented the wage from rising during the mid-century recession.⁴⁸² Apart from these theories constructed by historians using other types of

⁴⁷⁹ A. J. Pollard, 'The north-eastern economy and the agrarian crisis of 1438-1440', *Northern History*, 25 (1989), pp. 88-105; J. Hatcher, 'The great slump of the mid-fifteenth century', in R. H. Britnell and J. Hatcher (ed.), *Progress and problems in medieval England: essays in honour of Edward Miller* (Cambridge, 1996), pp. 237-272; P. Nightingale, 'England and the European depression of the mid-fifteenth century', *Journal of European Economic History*, 26 (1997), pp. 631-656; J. N. Hare, 'The demesne lessees of fifteenth-century Wiltshire', *Agricultural History Review*, 29 (1981), p. 2; J. Hatcher, A. J. Piper and D. Stone, 'Monastic mortality: Durham Priory, 1395-1529', *Economic History Review*, 59 (2006), p. 674.

⁴⁸⁰ Please be aware that Farmer's agricultural wage index ends at 1465. This limitation may create a misunderstanding of the trend after 1465. See, Farmer, 'Prices and wages, 1350-1500', pp. 520-524; J. Hatcher, *Plague, population and the English economy 1348-1530* (London, 1977), pp. 48-52.

⁴⁸¹ C. Given-Wilson, 'Service, serfdom and English labour legislation, 1350-1500', in A. Curry and E. Matthew (eds.), *Concepts and patterns of service in the later middle ages* (Woodbridge, 2000), pp. 24-25; D. Woodward, *Men at work: labourers and building craftsmen in the towns of northern England, 1450-1750* (Cambridge, 1995), pp. 182-183.

⁴⁸² H. A., Miskimin, 'Monetary movements and market structure - force for contraction in fourteenth- and fifteenth-century England', *Journal of Economic History*, 24 (1964), p. 478; J. H. Munro, 'Wage-stickiness, monetary changes, and real incomes in late-medieval England and the Low Countries, 1300-1500: did money

evidence, there is a concern grown among the historians who use wage evidence. For several decades, historians have pondered the steadiness in wage rates during the wake of the Black Death, as illustrated in Charts 6.1 and 6.2, questioning whether the wage evidence is capable of representing detailed economic changes.⁴⁸³ It has been suggested that, in practice, although we have the data of wage rate, there is little possibility for us to compose the trend in a labourer's actual income received in the respective operation because the amount of work done by the labourer is hard to come by.⁴⁸⁴ L. R. Poos, moreover, has suggested that during labour shortage, not only were opportunities of high pay available, but also the number of the opportunities was relatively expanded 'along seasonal or task-specific lines'.⁴⁸⁵ The suggestion is that, whilst the wage rates remained steady, the average labourer's annual income might increase during labour shortage. Thus, a rising trend possibly existed in the income.

The lack of information of the casual labourer's income provides a reason to examine the annual salary paid to the agricultural labourers who worked full-time. The *famuli* were usually contracted and paid on a yearly basis. In contrast to the freedom enjoyed by casual labourers, the term of employment of the *famuli* was stiff and the level of their salaries was generally low. In the aftermath of the Black Death,

matter?', *Research in Economic History*, 21 (2003), pp. 185-298.

⁴⁸³ Bridbury, 'The Black Death', pp. 577-578; B. F. Harvey, 'Introduction: the "crisis" of the early fourteenth century', in B. M. S. Campbell (ed.), *Before the Black Death: studies in the 'crisis' of the early fourteenth century* (Manchester and New York, 1991), p. 6; Hatcher, 'Aftermath', pp. 3-35; C. Dyer and S. A. C. Penn, 'Wages and earnings in late medieval England: evidence from the enforcement of the Labour Laws', *Economic History Review*, 2nd ser., 43 (1990), pp. 357, 372.

⁴⁸⁴ Dyer and Penn, 'Wages and earnings', pp. 357, 372.

⁴⁸⁵ L. R. Poos, *A rural society after the Black Death: Essex 1350-1525* (Cambridge, 1991), pp. 221-222.

when well-paid casual opportunities were abundant, labourers tended to avoid this kind of contract.⁴⁸⁶ The need to attract them from the casual sector should urge the employer to improve the value of the *famulus*'s salary until it was nearly on a par with the potential income a labourer could expect in the casual sector. Indeed, C. Dyer has recognised that 'wage costs of the *famuli* increased substantially in our period, but other wages were either static or falling slightly.'⁴⁸⁷ B. Dodds has demonstrated the rising trend in the *famulus*'s stipend on the Pittington manorial demesne, Durham, and M. Mate has demonstrated a similar trend from southeast England.⁴⁸⁸ The rising trend suggests that there was an upward movement of the labourer's income. The purpose of this chapter is to examine this possibility.

My approach to this subject includes two stages. The first stage aims to present the trends in casual money wage rates (the first section) and in the *famulus*'s annual income (the second section) using manorial accounts, which preserve detailed records of wages and salaries. Yet the *famulus*'s income included the cash payment, i.e. the stipend, and the grain delivery. Between the two components, the grain delivery was usually worth more, but its price was falling during this period and depreciating the value of the salary package. This phenomenon brings about a critical problem that

⁴⁸⁶ C. Dyer, *Lords and peasants in a changing society* (Cambridge, 1980), pp. 142-143; Dyer, and Penn, 'Wages and earnings', pp. 366-372; Hatcher, 'Aftermath', p. 28.

⁴⁸⁷ Dyer, *Lords and peasants*, pp. 142-143.

⁴⁸⁸ B. Dodds, 'Workers on the Pittington demesne in the late middle ages', *Archaeologia Aeliana: miscellaneous tracts relating to antiquity*, 5th ser., 28 (2000), pp. 151-154; M. Mate, 'Tenant farming and tenant farmers: Kent and Sussex', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), p. 691.

shall be addressed in the second stage – to what extent does the reported rising trend in stipends represent, if ever, labour shortage? The second stage, i.e. the third section, is intended to tackle this problem by answering; first, how the changes in the overall value were relating to the trends in casual wage rates; secondly, how the values of the two components responded to labour shortage; thirdly, how the changes in the overall value of the salary were received by the employers in the management of labour; fourthly, whether there were cases demonstrating genuine increases in the overall value of the salary. In the end, it will be demonstrated that the stipend was the factor that increased the value of the salary package in the middle of falling prices of grain and that there was a genuine rising trend in the salary. The approach follows a concept that, in a market where labourers freely chose the best one between two types of employment, when the prospects were better in one sector, it attracted labourers from the other and forced the other to raise the wage rate. Therefore, a genuine increase in the *famulus*'s salary should be a reflection of the increasing income of the casual labourer.

6.1 Limitations of casual wage evidence.

Casual wage data are an important source for the economic historian, but their limitations need to be understood. It has been demonstrated in Chapter 2 that casual

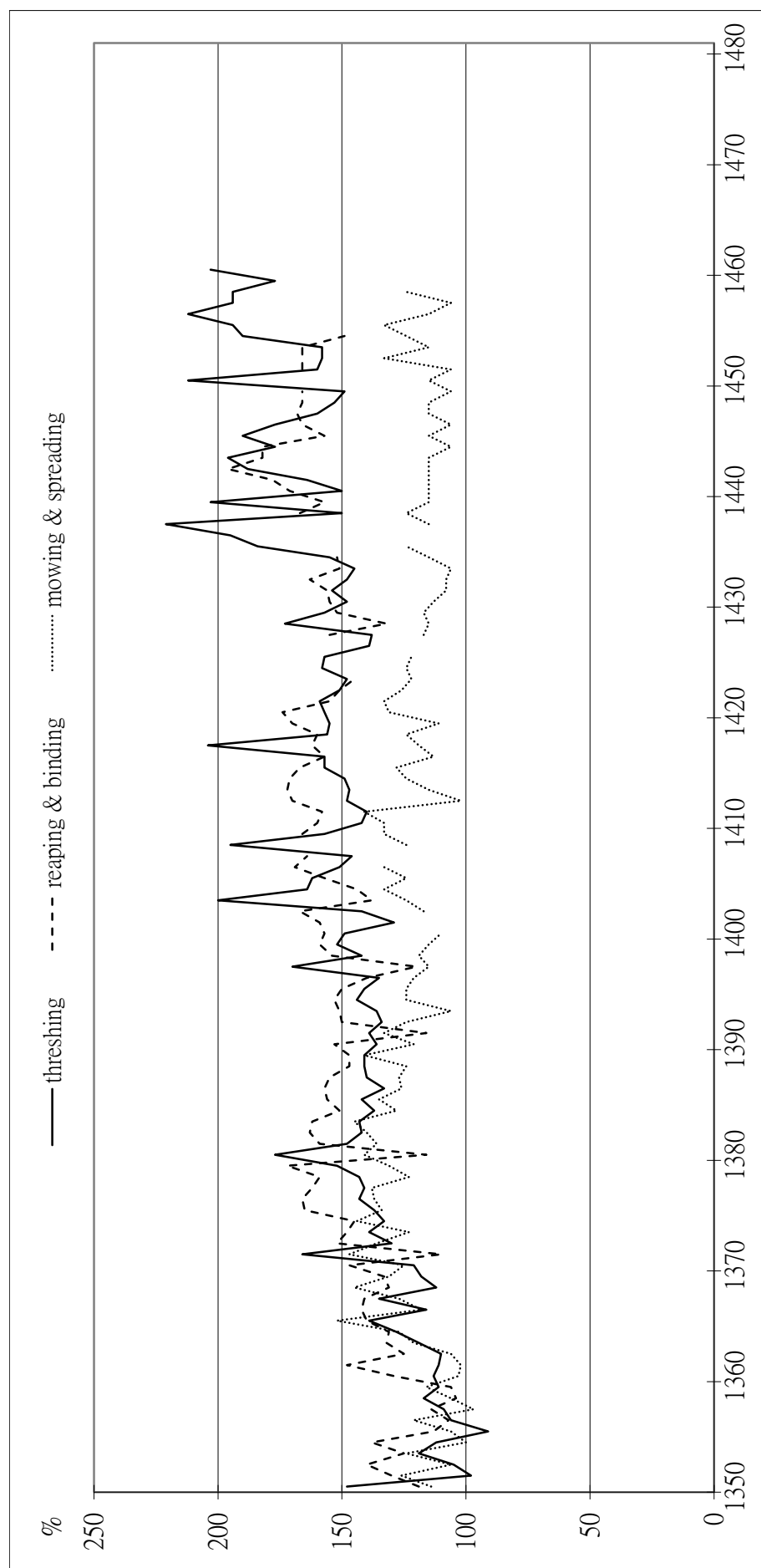
wage rates alone might be a good indicator of shifts between supply and demand for labour over longer periods; but to interpret detailed changes in the labour market over the short term or to illustrate the labourer's income, additional information is needed. In this section I will demonstrate two limitations of casual wage evidence. First, the existing wage series are statistical results calculated of a source material that contains discontinuities and regional diversities. The wage data in original documents present rather different patterns of movement of wage rates. Secondly, the wage data stand for the price of finishing a piece-work, not directly indicating the labourer's income.

Regarding the statistics, there is a difference between the wage series and raw wage data. Chart 6.3 is produced using Farmer's wage series to indicate the trends and changes in the wage rates in the harvest, threshing, and mowing and spreading. The divergence among the three wage series is curious.⁴⁸⁹ Given that labour supply is the determinant, either in shortage or in surplus it should have similar influence on the labour market rather than creating a rising trend in threshing wage rates but a slightly falling one in mowing and spreading wages after 1400.⁴⁹⁰ Giving that demand is the determinant, it is strange that the wage rate paid in the busiest operation is relatively stable when rising and falling appear in the other two. The other puzzle is fluctuations in the chart. It is clear that the spike in c. 1350 is a result of the Black Death. The high

⁴⁸⁹ Farmer, 'Prices and wages, 1350-1500', pp. 516-518.

⁴⁹⁰ Ibid, pp. 468-474.

Chart 6.3 The indices of money wage rates in seasonal operations, 1350-1460.



Source: D. L. Farmer, 'Prices and wages, 1350-1500', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 516-518.

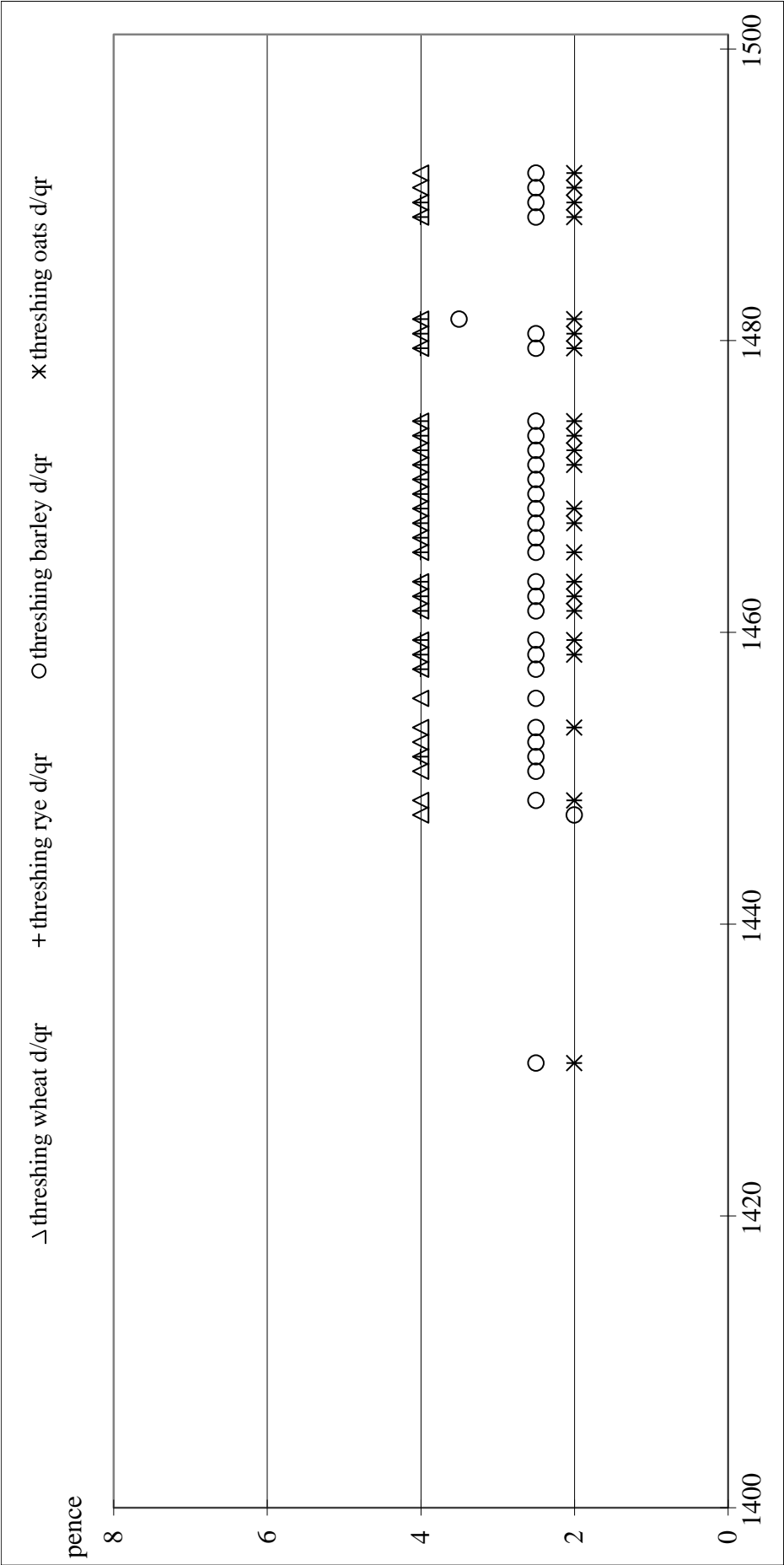
harvest wage rate in *c.* 1360 is another result of mass mortality and probably the same in *c.* 1370. But we must be careful following these detailed fluctuations, because most fluctuations are merely discontinuities in the raw wage data.⁴⁹¹

Approaching raw wage data in the source material, we are struck by the different but consistent trend in money wage rates. Similar to J. H. Munro's finding in urban artisan nominal wage data, the trend in the raw data on individual agricultural estates presents certain 'wage-stickiness'.⁴⁹² Examples of raw wage data are extracted from four manorial demesnes and drawn into Charts 6.4, 6.5, 6.6 and 6.7 to demonstrate the said wage-stickiness. Over this century, the casual wage rates on Elvethall manor and Ormesby St Margaret manor remained almost unchanged. Fluctuations indeed existed at Overton, where the wage rate fell to 8*d* per day and recovered to 9*d* before 1420. A possibly permanent increment happened in *c.* 1440. Still, over the period in question, the threshing wages remained unchanged. At Longbridge Deverill, the wage rate of threshing wheat swelled in the middle of the 1440s and rose again in the 1470s, whilst the wage rates of threshing the other types of grain did not change. These four cases illustrate that the wage rate tends to either stay unchanged or move smoothly during the fifteenth century with a few considerable changes, in contrast to the fluctuations seen in Farmer's wage series that might be a result of discontinuities in raw wage

⁴⁹¹ Farmer has explained how the national averages were calculated. See *ibid.*, pp. 495-498. Clark, on the other hand, has illustrated a relatively comprehensible pattern of changes in nominal wages; see Clark, 'The long march of history', p. 116.

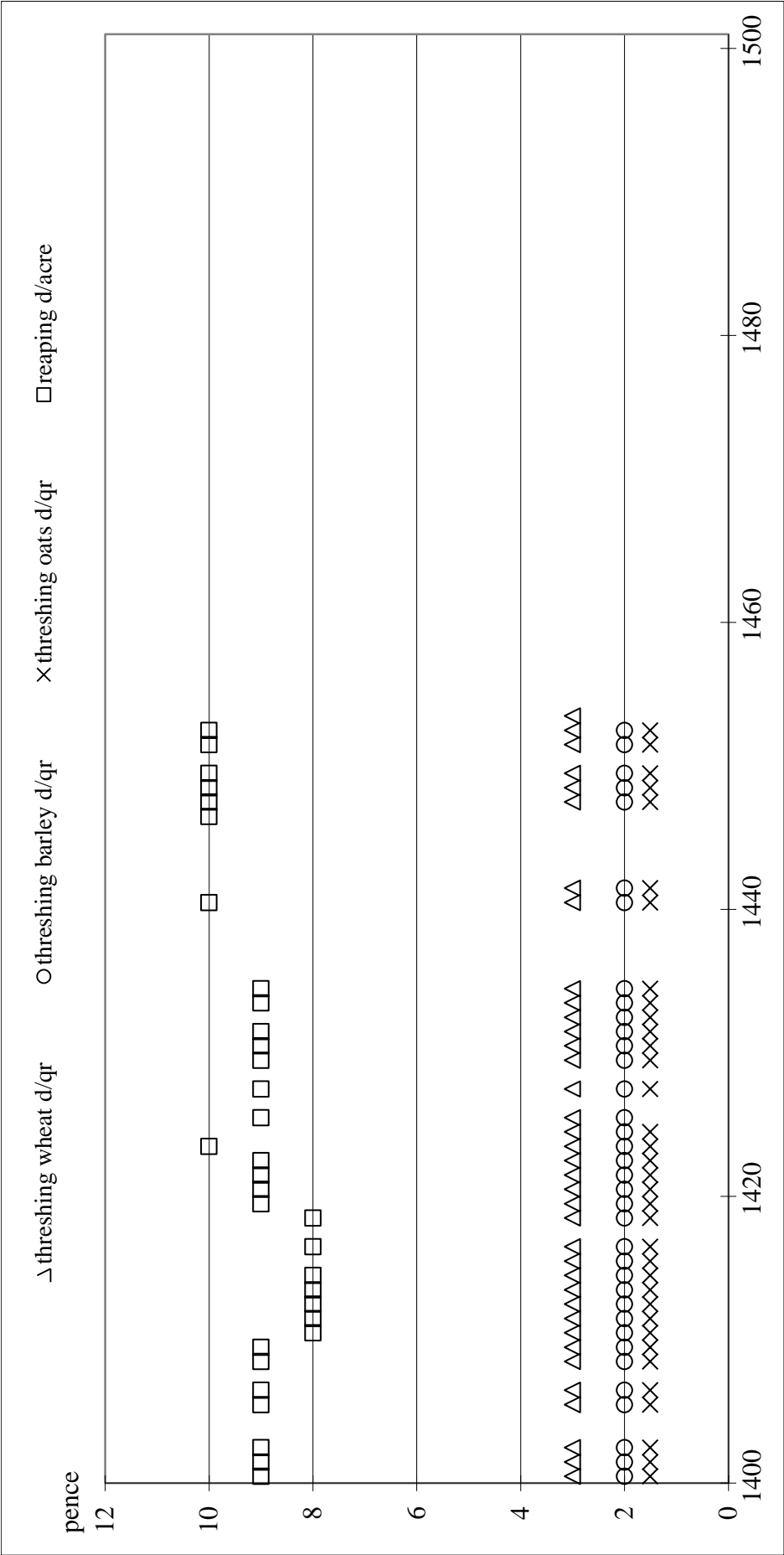
⁴⁹² Munro, 'Wage-stickiness', pp. 213-217.

Chart 6.4 The threshing wage rates on the Elvethall manorial demesne, Durham, 1400-1500



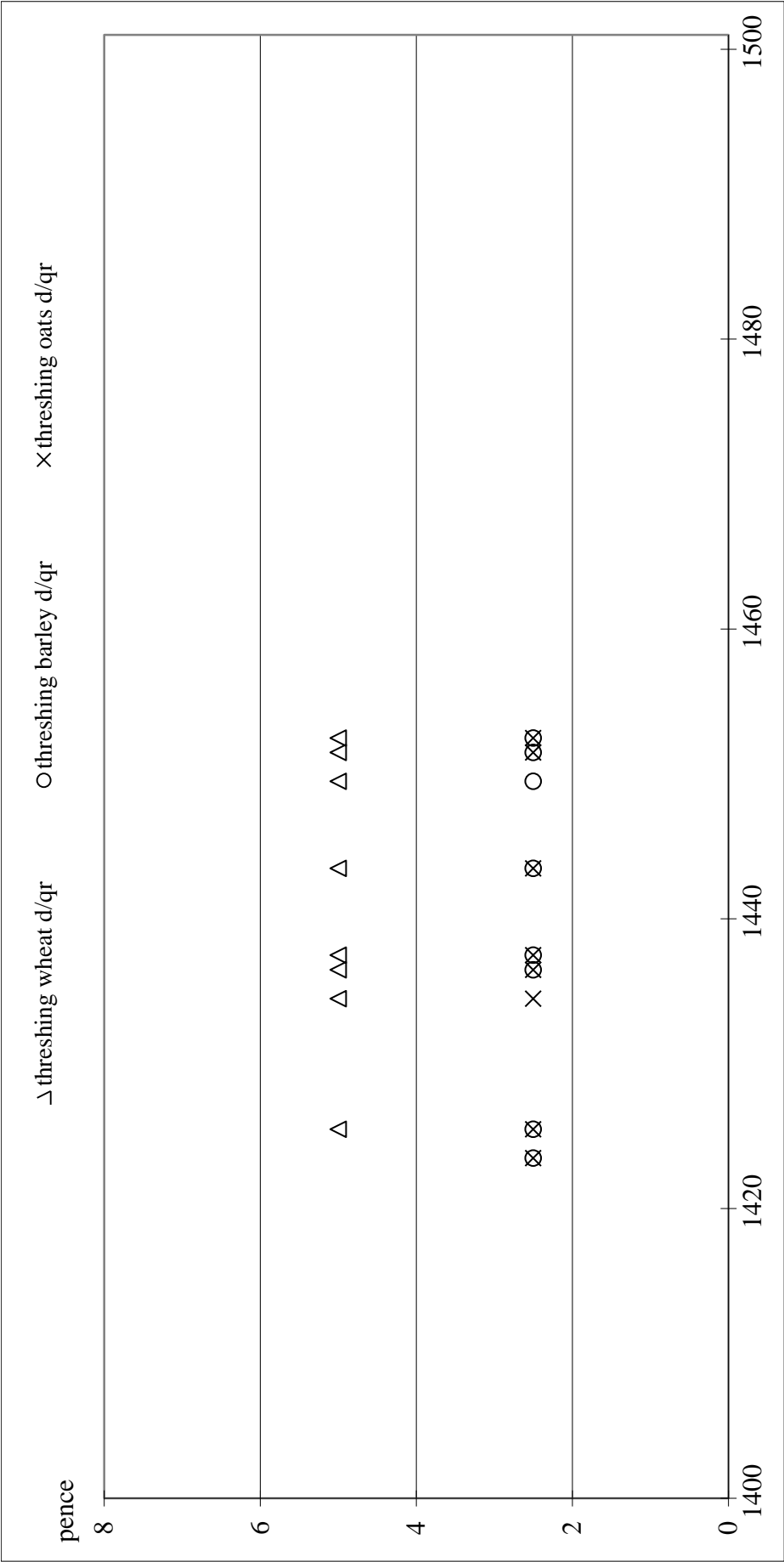
Sources: DCDM, EAR, 1430-1491.

Chart 6.5 The threshing and reaping wage rates on the Overton manorial demesne, Hampshire, 1400-1460



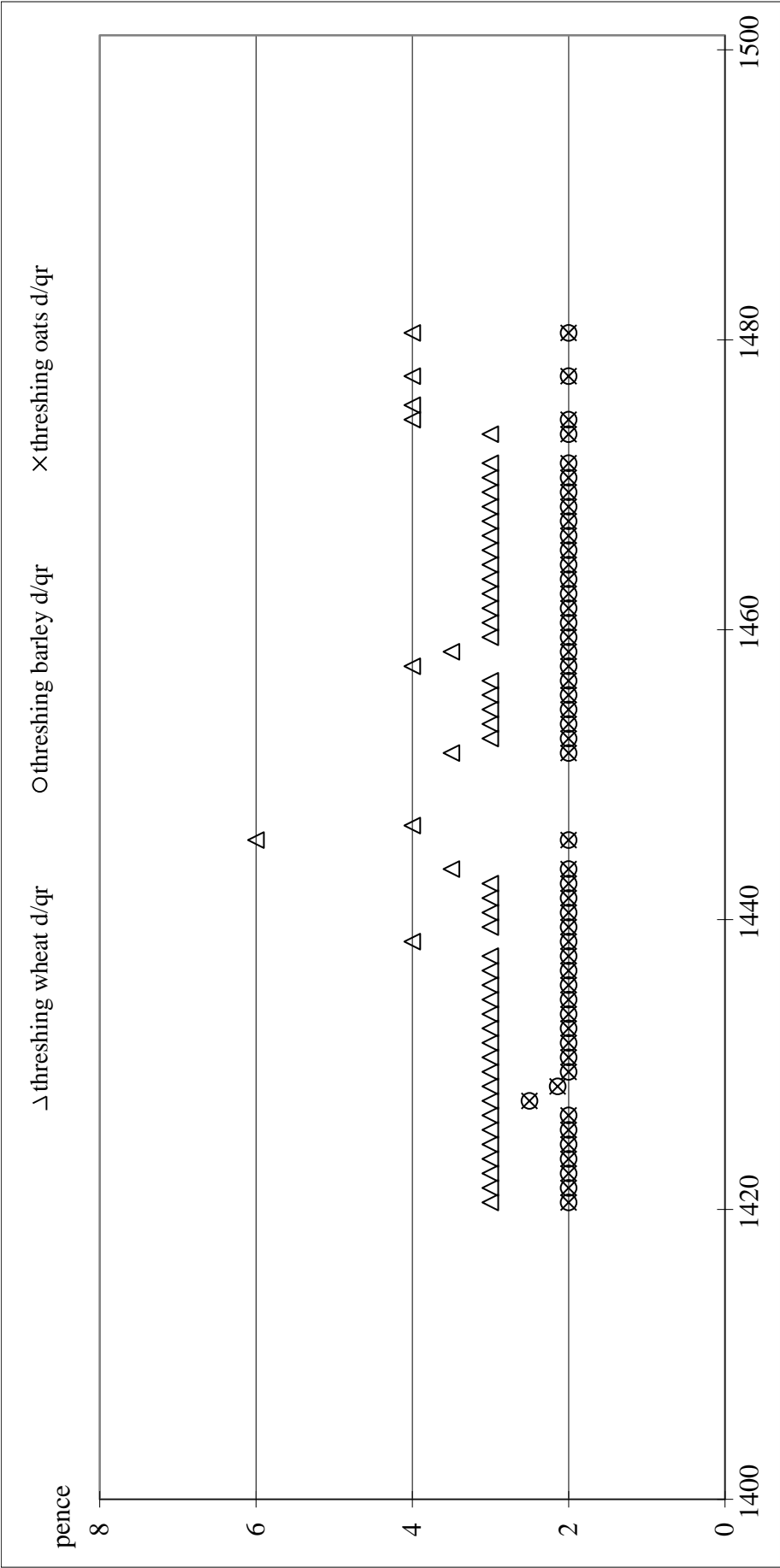
Sources: HRO, 11M59/B1/150-191.

Chart 6.6 The threshing wage rates on the Ormesby St Margaret manorial demesne, Norfolk, 1420-1460



Sources: TNA, SC 6/939/1-SC 6/941/1.

Chart 6.7 The threshing wage rates on the Longbridge Deverill manorial demesne, Wiltshire, 1420-1480



Sources: SHC, T\PH\lon/2/6/9815-6, 9818-21, 9823-6, 9829, 9830-3, 9835-41, 9869-70, 9872, 9874-7, 10613, 10615, 10708-9; T\PH\lon/2/7/9940-2, 9944-62, 9964.

data. The suggestion is that on individual manors steadiness was the norm in casual wage rates during this century.⁴⁹³

The trends in raw wage data imply sluggishness of the wage rate's response to economic events. Regarding the sluggishness, historians, on the one hand, suggest that since money wages were regulated by the government, other types of payments might be issued to make up the reasonable value of the wage package; on the other, historians also believe that, despite the said sluggishness, the real wage, which is calculated of the wage rate and the price level, changed and that the change may account for the improvement in the labourer's living standard. Both considerations rely on the constitution of the wage. As for the former, the wage package had to include other types of payment whose value increases and is suitable for examination; as for the latter, because money wage data are an element in the calculation of real wage rates, when money wage rates are not a proper reflection of the market condition, they will bring about problematic calculated results. These two points are presented in the discussion of the wages in the threshing and the harvest operations.⁴⁹⁴

Record of the cost of threshing labour preserves consistent wage data that were available from the estates which cultivated their field and even from the institutions where little or no grain was grown but received sheaves from affiliated or external

⁴⁹³ The changes at Overton might be explained by the relatively competitive labour market in the harvest as demonstrated in Chapter 3.

⁴⁹⁴ The weeding/mowing/haymaking wages are omitted in this chapter because of the financial insignificance of them in the source material as demonstrated in Chapter 3.

sources. Even better, during the period under consideration threshers were normally paid by cash, forming robust source material for quantitative analysis.⁴⁹⁵ Threshing wages were normally counted by piecework arranged in accordance with the types of grain.⁴⁹⁶ The labour of threshing a quarter of wheat was the most expensive, *e.g.* 3*d* at Overton; barley was the second, *i.e.* 2*d*; and the threshing of oats was the least valuable task, worth 1½*d* on the same demesne. At Ormesby St Margaret, 5*d* was paid for threshing a quarter of wheat, and 2½*d* was paid for barley and oats.⁴⁹⁷ The wage rates of the sub-tasks varied place by place, but on individual demesnes the wage rates were mostly fixed. The Overton case represents the pattern on most estates of the bishops of Winchester. At Ebbesbourne, for example, the wage rates of 3*d*/2*d*/1½*d* for threshing a quarter of wheat/barley/oats were used since the beginning of this century until 1454/5.⁴⁹⁸ In Norfolk, on the Norwich Cathedral Priory's estate at Martham the rates were 5*d*/3*d* for threshing wheat and barley between 1400 and 1424; at Flegg,

⁴⁹⁵ Rogers, *A history of agriculture*, pp. 265-266.

⁴⁹⁶ A. Young, *The farmer's calendar* (London, 1809), p. 25. Only in a few cases, this task was paid by day. For example, at Pittington, in 1427/8, as no ordinary casual thresher was hired, Thomas Cowhird, a fixed-term farm servant, was hired for 104 days to be a 'thresher and worker' receiving 3*d* each day by contract (*ex convencione*); Dean and Chapter of Durham Muniments (hereafter DCDM), Pittington Account Roll (hereafter PAR) 1427/8. It seems that, mostly, the arrangement of daily work was made for processing rather small amounts of grain and the wage rate varied by person. At Catesby, in 1448/9, 2*d* with a meal was given for the threshing worker each day for only a few days; in the same year, a worker was paid 1½*d* each day in October, and the other one was paid 1*d* each day in September; The National Archives (hereafter TNA), SC 6/946/24. More oddities are found at Ormesby St Margaret. In 1430/1, 1½*d* and 2*d* both with meal were given to two workers for threshing various types of grains; and in 1423/4, three persons threshed 9qrs 2bu of wheat in three days but received merely 2*d* each daily; TNA, SC 6/939/1, 8A.

⁴⁹⁷ There is no direct evidence that explains how the varieties, either in tasks and in regions, were made, but a guess has been presented that the varieties roughly represent the different labour input into tasks. For example, some estimates are composed by Clark indicating the input into threshing wheat to be 2.25 times to threshing oats, and barley to be 1.75 times to oats. G. Clark, 'Productivity growth without technical change in European agriculture before 1850', *Journal of Economic History*, 47 (1987), pp. 426-428. Moreover, according to Young, the threshing wage was purposely counted by piece-work, see Young, *The farmer's calendar*, p. 25.

⁴⁹⁸ Hampshire Record Office (hereafter HRO), 11M59/B1/150-191.

threshing wheat/barley/oats were paid $4d/2\frac{1}{2}d/2\frac{1}{2}d$ per quarter in 1406-1426 with a few exceptions.⁴⁹⁹ In these cases, the threshing wage rate was so steady, that even during the serious outbreak of pestilence in *c.* 1440 there was no visible change in the wage rate on several Winchester estates whilst part of labour services was abandoned in that exact year.⁵⁰⁰ At Elvethall, despite the mortality at Durham Priory reported in J. Hatcher, D. Stone and A. Piper's study, no impact was observed on threshing wage rates on the adjacent demesne of Elvethall.⁵⁰¹

Fluctuations in threshing wage rates, although few, indeed exist in the original document and, to a limited extent, respond to economic conditions. A good example is from Battle Abbey's estate at Alciston in Sussex, where the thresher was given a twentieth of threshed grain until 1440 when the demesne was hit by pestilence. Thereafter, the wage rate was permanently increased to a fifteenth of threshed grain.⁵⁰² Higher wage rates were given in 1481/2, at Hurdwick, when $8d$ was paid for threshing a quarter of wheat, $6d$ for rye and $3d$ for oats in contrast to the former wage rates of $6d/5d/3d$. A possible explanation is an outbreak of plague in the end of the 1470s. After a gap in the record, in 1488/9 the wage rates stayed permanently at $7d/6d/2\frac{1}{2}d$.⁵⁰³ Reasons for other changes are less clear. At Longbridge Deverill, as

⁴⁹⁹ Norfolk Record Office (hereafter NRO), NRS 20D2 5905, 20D3 5926; DN/EST 9/12-18.

⁵⁰⁰ For example, at Ebbesbourne and Ecchinswell, see HRO, 11M59/B1/181-2.

⁵⁰¹ Hatcher, Piper and Stone, 'Monastic mortality', p. 674.

⁵⁰² East Sussex Record Office (hereafter ESRO), SAS/G44/93.

⁵⁰³ Devon Record Office (hereafter DRO), D52/1 Hurdwick 1488/9.

shown in Chart 6.7, the wage rate of threshing wheat surged in the early half of the 1440s whilst the wage rates of threshing the other types of grain was mute.⁵⁰⁴ Overall, two patterns are revealed in the above cases. First, when a temporary change happened the wage rate rose, but it returned to its previous level quickly afterwards; and alternatively, when a permanent change happened, the wage rate leaped up to a new level and remained steady. There was little fluctuation in raw wage data as in the published wage series, but steadiness step by step. Moreover, when changes happened they were likely to be restricted on the demesne. Even on the demesnes at Lullington and Alciston, which were three miles apart and which belonged to the same landlord, the threshing wages were different after 1440/1 when at Alciston the wage rose but it remained at a twentieth of the threshed grain at Lullington till the end of the record in 1465/6.⁵⁰⁵ Or at Elvethall and Pittington, Durham, threshing a quarter of barley rose from $2\frac{1}{2}d$ to $3d$ in 1398/9 at Pittington, but it remained at $2\frac{1}{2}d$ at Elvethall even into the sixteenth century.⁵⁰⁶

The steadiness in money wage rates makes threshing wage data a problematic source for interpreting economic change. It may be reasonable to assume that during labour shortage the labourer's income might be improved by increasing the quantity of work undertaken. This assumption soon confronts difficulties. Firstly, the threshing

⁵⁰⁴ Somerset Heritage Centre (hereafter SHC), T\PH\lon/2/8/9861.

⁵⁰⁵ TNA, SC 6/1025/10-1027/16.

⁵⁰⁶ DCDM, PAR 1398; DCDM, Elvethall Account Roll (hereafter EAR) 1424-1491.

task was usually done by a small group of labourers, whose number was not specified.

At Elvethall in 1472/3, 20qrs of wheat, 236qrs 6bu of barley, 6qrs of oats and 10qrs of rye were threshed by Robert Watson, Robert Peth and associates.⁵⁰⁷ In 1462/3 at Hurdwick, Devon, Thomas Hornebroke and John Colman threshed for an extended period of around 189 days.⁵⁰⁸ Unless the number of workers is given, it is impossible to know how much an average individual did and earned. Secondly, in only a few cases is it possible to know how much a worker did. In 1390/1, at Pittington, John Carter threshed for nine weeks. In 1405/6, again, he threshed 36qrs of wheat, 69qrs of barley, 8qrs of oats and 3qrs of peas; and was recorded in the singular (*eidem*). In 1427/8, Thomas Cowherd worked for 104 days as a ‘thresher and worker’ between Martinmas and Pentecost.⁵⁰⁹ The labourers who threshed a large amount of grain could earn a small fortune from this seasonal operation as shown in Table 6.1. This

| Table 6.1 The pay and workers on the Pittington demesne, Durham | |
|---|---------|
| John Carter, 1405/6 | 31s 1d |
| John Carter and Robert Bell, 1406/7 | 52s 8d |
| Robert Bell, 1407/8 | 30s 11d |
| Robert Bell, 1408/9 | 22s 11d |
| Thomas Bron and Robert Bell, 1409/10 | 9s |
| William Tomson, 1409/10 | 21s 10d |
| Source: DCDM, PAR 1405/6, 1406/7, 1407/8, 1408/9, 1409/10. | |

⁵⁰⁷ ‘*Et solucione Roberto Watson Roberto Peth et aliis pro trituratione*, see DCDM, EAR 1472/3.

⁵⁰⁸ The work was threshing 61qrs 2bu of wheat, 175qrs of oats, and 33qrs 3bu of rye; DRO, D52/1 1462. The number of work-days is calculated using Clark’s estimate of threshing rates; Clark, ‘Productivity growth’, p. 426; idem, ‘The long march of history’, p. 112.

⁵⁰⁹ DCDM, PAR 1390/1, 1405/6, 1427/8.

pattern emphasises that the amount of work is a determinant of the labourer's income.

But, like the first case, there is a lack of consistent record for analysing the labourer's income.

As for the harvest wage series, they are composed of the wage data that stand for 'harvesting an acre of crops' or 'working for a day', but the raw wage data are much more complicated and are illustrated in Table 6.2.⁵¹⁰ Firstly, accounting practice is responsible for this complexity. In detail, the harvest operation employed a number of sub-tasks, which were paid differently, like the sub-tasks in threshing. As long as the

| Table 6.2 The composition of the harvest wage in the fifteenth century | | | |
|---|--|-----------------------------------|-----|
| | Cash payments | Food and others | |
| Acton 1410 | 4d/day | | n/a |
| Alciston 1478 | £7 15s 8d in bulk | Inclusive | |
| Apuldram 1450 | 62s 10d in bulk | Inclusive | |
| Bromham 1436 | 6s in bulk | Inclusive | |
| Catesby 1449 | mowing – 4d/day reaping – 2d/day or 3d/day binding – 2d/day or 2.5d/day racking barley – 2d/day | <i>ad mensam</i> | |
| Crawley 1448 | 10d/acre | | n/a |
| Elvethall 1449 | 119s 1d seasonal total cost | Inclusive | |
| Ebbesbourne 1450 | 10d/acre | | n/a |
| Ecchinswell 1450 | 10d/acre | | n/a |
| Hurdwick 1463 | £8 5s 4d seasonal total cost | | n/a |
| Longbridge Deverill 1456 | haymaking – 6d/acre harvesting wheat – 9d/acre barley/oats/drage – 7.5d/acre | | n/a |
| Lullinton 1451 | by task – 4d/day contract 5 weeks – 7s 4d | <i>ad mensam</i> | |
| Monkton Deverill 1403 | 11d/acre | | n/a |
| Ormesby St Margaret 1452 | Contract 4 weeks 4 days 6s, 4s, 5s 6d, 8s 1d, 8s 1d by task mowing – 6d/day reaping – 3-4d/day | contract workers <i>ad mensam</i> | |
| Overton 1450 | 10d/acre | | n/a |
| Pittington 1419 | 4d/day | | n/a |
| Sources: ESRO, SAS/G44/124; TNA, SC 6/940/10, SC 6/946/24, SC 6/989/13, SC 6/1018/24, SC 6/1027/3, SC 6/1047/13; HRO, 11M59/B1/186-7; DCDM, EAR 1448/9, PAR 1418/9; DRO, D52/1; SHC, T\PH\lon/2/7/9840, T\PH\lon/2/10/9692. | | | |

⁵¹⁰ Farmer, 'Prices and wages, 1350-1500', p. 471.

record is consistent from individual series of account, the complexity will not be a hindrance for analysis. Moreover, the Table shows that meals are an important part of the wage package but usually the value of the meal is not recorded. This arrangement corresponds to historians' suspicion that the steady wage rate was compensated by meals to avoid wage regulations.⁵¹¹ The complexity reflects a simple fact that the harvest operation is the busiest and the labour market is the most competitive.

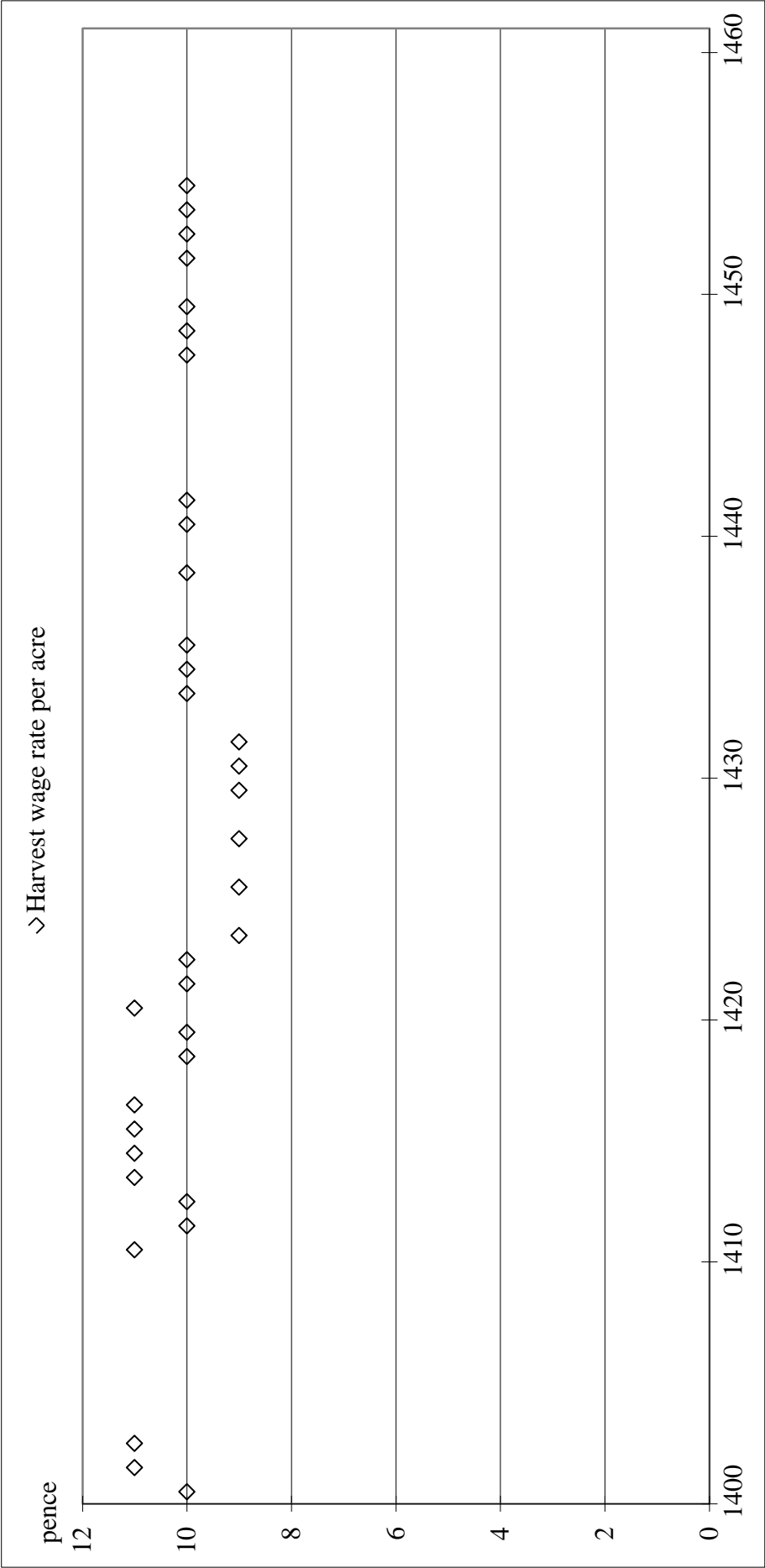
Struggling with these complicated arrangements, I was able to gather data from a few series of accounts that contain cash payments as the only harvest wage. With these data, the trend in the wage rate can be reconstructed. Overton in Chart 6.5 above is an example that shows fluctuations in harvest wage rates. On Ebbesbourne manor, the wage was 11*d* for harvesting each acre in *c.* 1400, falling to 10*d* in 1410 and 1411. It fell to and stayed at 10*d* in 1418 with a temporary return to 11*d* in 1420/1. Between 1423 and 1432 the wage rate was only 9*d*; thereafter, it was fixed at 10*d*.⁵¹² Details are drawn into Chart 6.8. On another Winchester manor, a temporary change occurred at Crawley from 9*d* per acre in 1440/1 to 12*d* in 1441/2 and fell to 10*d* thereafter.⁵¹³ On the manorial demesne at Longbridge Deverill, sub-task wage rates fluctuated often from 10*d* each acre for harvesting various types of grain in the beginning, to 12*d* for wheat and 8*d* for the rest in the 1450s, and settled at 10*d* for harvesting an acre of

⁵¹¹ Hatcher, 'Aftermath', pp. 3-35. Farmer has, however, explained that the data were extracted from the 'wages paid to workers to whom no food was given', see, 'Prices and wages, 1350-1500', p. 496.

⁵¹² HRO, 11M59/B1/150-191.

⁵¹³ HRO, 11M59/B1/181, 182.

Chart 6.8 The harvest wage on the Ebbesbourne manorial demesne, Wiltshire, 1400-1460



Source: HRO, 11M59/B1/150-191.

wheat and 8*d* for harvesting the rest until 1480.⁵¹⁴ In 1458/9, harvesting an acre of wheat was paid 10*d* and the rest 7*d*. Just as in the previous year, the wage of harvesting wheat was counted by day, but harvesting barley was paid 8*d* each acre and the rest was paid 7*d*.⁵¹⁵ On the estates of Westminster Abbey, the harvest wage rate given in the 1440s was puzzlingly lower than normal.⁵¹⁶ This observation complies with the opinion that the harvest wage rate tends to be more flexible than others because of the pressure on the supply in this busy season. However, although slight increments are found in a few cases, there is no permanent rising or falling in money wage rates over this century.

In contrast to the threshing wage, cash payments were only a part of the harvest wage package, which usually also included food or drink, and sometimes both.⁵¹⁷ The value of this part of the wage package is sometimes specified in the cost of harvest labour, but it is also possible to be hidden in the discharge of the manor's produce that was used to bake bread and to brew beer for consumption in the autumn (*pro expensis autumpnalibus*). It has been suggested by Hatcher that this arrangement was exploited to improve the employer's offer during labour shortage either to attract labourers or to avoid the regulations on money wages.⁵¹⁸ Dyer has discovered a consistent rising

⁵¹⁴ SHC, T\PH\lon/2/6/9836-40; SHC, T\PH\lon/2/7/9940-2, 9944-61.

⁵¹⁵ SHC, T\PH\lon/2/6/9832, 9836-41; SHC, T\PH\lon/2/7/9940-2, 9944-5.

⁵¹⁶ Beveridge, 'Westminster wages', p. 25.

⁵¹⁷ Farmer, 'Prices and wages, 1350-1500', pp. 469-70.

⁵¹⁸ Hatcher, 'Aftermath', pp. 20-24.

trend in the quality of the harvest meal on Sedgeford manor, Norfolk, after the Black Death. The rising value of the meal was eventually discovered and recognised by the law. The legislation of 1445 allowed the value to be raised up to 2d each person daily, in contrast to the 1350 legislation that ordered no meal to be issued.⁵¹⁹

This approach is, however, limited by the fifteenth-century source material. To construct the trend, we need the value of foodstuffs, the number of consumers, and the changes in them. Most fifteenth-century accounts keep one or two types of the above information. But, it seems only in Norfolk, like Sedgeford, is complete information available. The Ormesby St Margaret manorial accounts provide similar details as the one for Sedgeford; and it covers the period as late as 1452. The record includes a list of foodstuffs extracted from storage, accompanied by the estimated price of them. A list of workers is put on top of the list of foodstuffs. It indicates the number of man-days, upon which the meal was served. With these details I was able to compose Table 6.3, which illustrates the change in the value of the meal over a period of about thirty years. In the table, we see a downward trend. During the same period the money wage rates had barely changed, *i.e.* mowing was paid 6d per day, reaping and binding was 3d/4d. Could this mean that the value of the wage package was falling on this demesne? A firm conclusion should not be made upon this flimsy evidence, but I feel

⁵¹⁹ *Statutes of the Realm*, 1, p. 311; *Statutes of the Realm*, 2, p. 338; C. Dyer, 'Changes in diet in the late middle ages: the case of harvest workers', *Agricultural History Review*, 36 (1988), pp. 21-37.

confident to state, knowing the price level was generally falling during this period, that the meal was unlikely to be an element used to improve the value of the wage package on this demesne, unless another source material says otherwise.

| Table 6.3 The value of the harvest meal at Ormesby St Margaret | | | | |
|--|--------|---------|-------|--------|
| (Summer) | 1424 | 1425 | 1435 | 1452 |
| Number of man-days | 849 | 811 | 716 | 377 |
| Purchase in the market | 6s 7d | 8s 11½d | 4s | 12d |
| Withdrawal from the manor | | | | |
| - wheat | 26s 8d | 26s 8d | 24s | 8s 4d |
| - malt | £4 15d | £4 15s | 56s | 8s 6d |
| - ground oats | - | - | 20d | 8d |
| - beef | 10s | 12s | 11s | 8s |
| - lamb | 16s | 20s | 10s | 3s 4d |
| - pigeons | - | - | - | 21d |
| - geese | - | - | 9d | - |
| - fish | 8s 9d | 8s 9d | - | - |
| - dairy products and eggs | 6s 6d | 6s 6d | 3s 4d | 3s 10d |
| Daily value a worker consumed | 2.2d | 2.5d | 1.9d | 1.3d |
| Sources: TNA, SC 6/939/1, 2, 10, -940/10. | | | | |

It is possible that, although the wage rate barely changed and the value of meal hardly increased, labourers might take on multiple opportunities during the harvest season to maximise income. Evidence shows that it is possible for labourers to have more than one hire during the two-month season of the harvest. At Elvethall, firstly, in 1397, the first reaping happened on 9 August; the second happened two days later; the third one was on 14th, Monday, using 33 reapers and 5 binders; it continued from Wednesday to Saturday; in the following week only 7 reapers and up to 2 binders

were employed to finish the work. That is, although it took ten days to collect the harvest in full, many people were employed for only one week.⁵²⁰ A case from Catesby manorial demesne, Berkshire, illustrates that labourers were able to increase income by taking on various sub-tasks, as shown in Table 6.4. Two women Margera Liburi and Emma Bene, for example, were on lower-paid tasks, but Liburi made 4s 8d and Bene earned 5s 2d, more than their male co-workers did, because the two worked for over 20 days. Those well-paid mowers, nevertheless, were able to find other opportunities like those two women did. On Ormesby St Margaret manorial demesne in 1435, John Deye mowed 24 acres and earned 16s; the same John joined the reaping group working for 6 days and earned 22d extra.⁵²¹ Apparently the wage rate or the

| Table 6.4 The harvest labour arrangement on the Catesby demesne, Berkshire, 1449 | | | | |
|--|--|--|--|---|
| | Mowing barley (days worked x daily wage) | Reaping wheat (days worked x daily wage) | Fetching barley (days worked x daily wage) | Collecting / binding (days worked x daily wage) |
| Robertus Frende | 5×4d | | | |
| Leonardus Medylton | 4×4d | | | |
| Johannis Bodymere | 1×4d | | | |
| John, servant of J.B. | 1×4d | | | |
| Margera Liburi | | | 4×2d | 24×2d |
| Emma Bene | | 7×3d | 8×2d | 10×2½d |
| Johanna Frende | | | | 4×2½d |
| Isabella Meryngton | | 7×3d | 8×2d | |
| Johannis Meryngton | | 6×2d | | |
| Johannis Derversale | | 7×2½d | 12×2½d | |
| Nocholus Dorsette | | 7×3d | 8×2d | |
| Edmondus Carter | | | 12×2d | |
| Elena Bradwell | | | 5×2d | |
| Source: TNA, SC 6/946/24 | | | | |

⁵²⁰ DCDM, EAR, 1396/7.

⁵²¹ TNA, SC 6/939/10.

meal was not the only determinant of the labourer's income. The amount of work is another important factor.

The advantage of using casual wage rates to indicate changes in the economy is the abundant record found in the manorial accounts, supplemented by the framework that the casual wage rate stands for a unit of labour power, whose price fluctuated in accordance with supply and demand. When the demand was high or the supply was low, the price of labour power rose, and *vice versa*. When the Black Death was raging, employers had to pay two or three times the ordinary wage to hire harvesters or leave the crops rotten in the field.⁵²² Certainly, the labourer's income was like to increase in those events, but the wage rate did not have to rise or fall to change the income. In ordinary years, the local labour supply had to cope with the high demand in the good harvest; and had to endure the weak job markets in bad harvests. Fluctuations in sown acreages had the same effects. It is likely that a labourer earned 10s in an operation and the other earned only 5s because of lack of opportunities; but in the same operation of another year both were able to earn 10s though receiving the same wage rate. When historians try to work out the lack of changes in money wage rates by counting in payments in kind and still find difficult to make out the rising trend that reflects labour shortage, the amount of work might be the missing factor. As for calculating the real wage rate, the level of income might be more precise than the

⁵²² R. B. Dobson (ed.), *The Peasants' Revolt of 1381* (London, 1983), pp. 59-63.

because under-employment is common in agriculture and the wage rates do not reflect under-employment. The difficulty is that over the period under consideration the source material does not provide consistent data for us to examine the casual labourer's income.

6.2 Remuneration of the *famuli*

In the earlier period, some *famuli* received payments in cash and grain, others performed their duties as a customary service, and some worked on customary terms but also received payment; by 1400 they were mostly paid labourers hired from the market.⁵²³ The difference between the salary of the *famuli* and the casual wage rate is that their salary was counted on a yearly basis. The work period was usually 52 weeks in the year, like at Lullington, or 50 weeks, as at Pittington. The contract term could be manipulated to fit particular demands. In the sowing, additional ploughmen were hired or at the lambing time assistants were employed. But fixed-term contracts were not commonly used in hiring the ordinary *famuli* who did ploughing and shepherding. The level of their salaries was relative to casual wage rates. Dyer and Penn have reported how labourers disliked long-term contracts and preferred casual hire, because

⁵²³ M. M. Postan, *The famulus: the estate labourer in the 12th and 13th centuries*, *Economic History Review Supplements* 2 (1954), pp. 37, 43-46; D. L. Farmer, 'The *famuli* in the later middle ages', in R. Britnell and J. Hatcher (eds.), *Progress and problems in medieval England* (Cambridge, 1996), pp. 28-209, 225, 229-236.

the *famuli* were relatively poorly paid in the aftermath of the Black Death.⁵²⁴ For the employer, the solution was to improve the job offer. Therefore, the level of the annual salary had the tendency to approach the level of a casual labourer's annual income. On this basis, the salary might be a suitable proxy for a labourer's income when there is no other evidence of income available.

Early studies of the salary of the *famuli* have been presented by Farmer in his papers on wages and *famuli*, in which a general rising trend in the aftermath of the Black Death is recognised.⁵²⁵ Mate's table of the salaries extracted from the Otford and Barton accounts confirms this rising trend.⁵²⁶ Another good example is produced by Dodds using the Pittington manorial accounts indicating that a rising trend started in the 1370s, which is the date when the series of account starts, and ended in around 1450, when the series ends.⁵²⁷ However, the attempt of constructing an index of the salaries has to face many constraints. First, different *famuli* posts had different terms of employment, i.e. different rates and compositions of salaries. Secondly, the salaries paid to part-time *famuli* must be recognised and removed because they do not stand for annual incomes. Thirdly, as in the earlier periods when *famuli* were tenants who work by service, the labourer's social status might prevent him from receiving the market rate. Fourthly, although under annual contract, the *famuli* were not necessarily

⁵²⁴ Dyer, and Penn, 'Wages and earnings', pp. 366-7, 368-70.

⁵²⁵ Farmer, 'Prices and wages, 1350-1500', pp. 480-3; idem, 'The *famuli*', pp. 225-30, 234-6

⁵²⁶ Mate, 'Kent and Sussex', p. 691.

⁵²⁷ Dodds, 'Workers on the Pittington demesne', pp. 151-154.

working full-time. Accordingly, Farmer and Hatcher have remarked on the difficulty of constructing an index of salaries.⁵²⁸ Fortunately, as one may see in the source material, over the fifteenth century the pattern of employing the *famuli* is consistent and odd terms of employment are easy to spot. We can address the above difficulties by carefully distinguishing oddities from ordinary terms. The following discussion will firstly demonstrate the consistency of the source material; then we will embark on the construction of the index.

First, the record itself provides basic information of the identities of the *famuli*. In general, the *famuli* listed in the pay roll consist of lesser officials, regular workers, fixed-term workers and temporary helpers, whose terms of employment are clearly stated as by year (*per annum*), by fixed-term (*e.g.* from Candlemas to 1 August for the fixed-term ploughman), and for a period (*e.g.* nine weeks for the lambing helper). This record allows us to concentrate on lesser officials and regular workers for their annual salaries. However, the terms of employing the lesser officials are complicated. The leading *famulus*, *i.e.* the reeve, bailiff, or serjeant, could be a specialised manager. It is also possible that he did physical labour, like one Thomas Weynild working on the estate of Pontes in Essex as serjeant but taking care of cows and sheep and also supervising reaping.⁵²⁹ Some might even have substantial holdings and could not

⁵²⁸ Farmer, 'The *famuli*', p. 229; Hatcher, 'Aftermath', p. 29.

⁵²⁹ R. H. Britnell, 'Minor landlords in England and medieval agrarian capitalism', *Past & Present* 89 (1980), p. 7.

work full-time on the demesne.⁵³⁰ Regarding their salaries, at Longbridge Deverill, a significantly higher stipend of 40s, as against the ordinary rate 13s 4d, was received by the manager.⁵³¹ The administrator at Hurdwick, Devon, received a *reward* of one mark on top of the already high stipend.⁵³² And at Ebbesbourne, the administrator was not listed in the payroll at all.⁵³³ The lesser officials' salaries must be excluded to avoid those inconsistencies. Overall, lesser officials were the managers responsible for hiring. It is unlikely that their terms of employment are representative of those of the ordinary *famuli*.

The ordinary *famuli* could only work full-time if the demesne post was their only undertaking, but some of them might have holdings though in an annual contract. A group of ploughmen were half-virgaters or fardel-men on the Glastonbury estate in the late fourteenth century. Their number reduced when the estate replaced them with stipendiary *famuli* in the fifteenth century, but a few still remained. For example, two ploughmen Richard Felippes and John Moor working on Monkton Deverill demesne in Wiltshire were half virgaters in c. 1420.⁵³⁴ They were in an annual contract (*per annum*) to plough on the demesne, and they had to work on their own holdings apart

⁵³⁰ Farmer, 'The *famuli*', pp. 227-8.

⁵³¹ For example, in the account of 1440/1, see SHC, T\PH\lon/2/6/9832.

⁵³² DRO, D52/1 Hurdwick 1462/3.

⁵³³ HRO, 11M59/B1/150-191.

⁵³⁴ It is not clear whether Farmer considered the *famuli* to be full-time farm workers or not. In one instance, he called them 'full-time *famuli*'; but in the discussion of land-holding of the *famuli*, he was demonstrating that the *famuli* usually had their own holdings. We take this as an inconsistency; and for this instance we take the land-holding *famuli* to be Farmer's stance of the economic background of the ordinary *famuli*. Farmer, 'The *famuli*', pp. 227-229.

from the ploughing responsibilities. Thus, their salaries were not their annual income. Their identities of half-virgaters are not explicitly given in the manorial accounts, but there are special arrangements that distinguish them from others. The salary package given to Felippes and Moor indicates that their grain livery was 25% lower than the ordinary rate and the stipend was only 5s which is much lower than the ordinary rate of 13s 4d.⁵³⁵ Elsewhere, special arrangements were also made to those who were hired by year but not working across the year. On Ormesby St Margaret manorial demesne in the early 1440s William Pack received the full stipend and board on top of a ploughing service of four acres on his holding as part of his remuneration. In the next year he only worked for the demesne in the winter ploughing. Apparently, Pack could only take on a yearly contract when his own holding was attended.⁵³⁶ The accounting practice that preserved the details of the salary package allows us to distinguish the ordinary terms from the odd ones, by means of exceptionally low stipends or special components of remuneration.

This accounting practice allows us to recognise and avoid another inconsistency. Some *famuli* cannot be easily categorised into the ordinary labourers, because they were not fully paid or because they were less capable. In the fifteenth century, some *famuli* were still working by customary service. Farmer has reported that, at Overton,

⁵³⁵ SHC, T\PH\lon/2/10/9880.

⁵³⁶ TNA, SC 6/940/5, 6.

four free *famuli* were paid 8s 4d each because they ‘were not’ serfs in 1420/1. In the same year, the carter and the shepherds were paid 5s because they ‘were’ serfs.⁵³⁷ The *famuli* by service were fairly common on the Winchester estate in the early fifteenth century. At Downton, Wiltshire, before 1418, eleven of nineteen *famuli* were service *famuli*, working with six stipendiary co-workers.⁵³⁸ They had quittance of rent, which was a component of their remuneration. Thus their salary package cannot be analysed equally with ordinary salary packages. Another issue that may bring about problems is the age or experience of the *famuli*. In some places a wage ladder may be found, like on the Ormesby St Margaret demesne, as illustrated in Table 6.5. We cannot help but wonder if the wage ladder was a reflection of the labourers’ physical capacity. Even so, this pattern does not hinder us from recognising the ordinary rate, i.e. 20s, given to

Table 6.5 The stipend given to the *famuli* on the Ormesby St Margaret demesne, Norfolk

| | 13s etc | 16s | 18s etc | 20s | 22s |
|----------------|---------|------|---------|------|------|
| Alex Bere | 1424 | 1425 | 1427 | 1430 | |
| Henry Sprig | 1425 | 1427 | 1430 | 1434 | |
| Roger Westgate | 1427 | 1430 | 1434 | | |
| John Scot | 1443 | 1444 | 1446 | 1447 | 1449 |
| William Smith | 1449 | 1451 | 1452 | | |
| Thomas Mathew | 1443 | 1444 | 1446 | 1451 | 1452 |

Sources: TNA, SC 6/939/1 – SC 6/940/11.

⁵³⁷ Farmer, ‘The *famuli*’, p. 235; HRO, 11M59/B1/166.

⁵³⁸ It was common that *famuli* worked as service tenants rather than stipendiaries in Wiltshire. E. Miller, ‘Tenant farming and tenant farmers: the Southern Counties’, in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 707-708, 710-711. At Ebbesbourne, *famuli* consisted of two lesser officials, three ploughing staffs, three herding staffs, and others; At Downton, before 1418, it employed three or four lesser officials, a huge ploughing crew of eight, five herding staffs including a bullock keeper and a swineherd, and others. There were two service *famuli* at Ebbesbourne, one reeve and one shepherd of ewes. At Downton, one reeve, two haywards, one ploughman, two oxherds, three shepherds, one bullock keeper, and one swineherd, eleven in total were service *famuli*; after 1422/3, the number reduced to nine.

the fully competent *famuli*. As long as the *famuli* were treated as an ordinary *famulus* or close to it, their wage data are eligible samples.

Fourthly, although by record and by law the regular *famuli* worked for the whole year, Felippes and Moor's case reminds that the *famuli* might work part-time under annual contract.⁵³⁹ The full-time employment may be demonstrated from how much work they did. The ploughmen had to plough for most of the year except for some months during the winter and probably the harvest season. An average plough-team that included two ploughmen could cope with about 66 acres in the year for sowing, equal to around 200 workdays; and the fallow-ploughing task might extend the period to around 100 acres, *i.e.* c. 270 days, if in three-course rotation with two ploughings on the fallow.⁵⁴⁰ In Chapter 5, it was shown that on many demesnes the ploughmen indeed worked to this extreme if not more. The ploughing task alone kept the *famuli* busy in full-time work. In addition, their involvement in other operations was also important.⁵⁴¹ At Ormesby St Margaret, the *famuli* did around 40% of work in the harvest reaping, carrying, and stacking sheaves.⁵⁴² On other manors, the record is less clear, but gloves were issued to the *famuli* implying that they did some sort of work, probably carriage, in the harvest season. By estimating the number of gloves, we find

⁵³⁹ Poos, *A rural society*, pp. 201-2.

⁵⁴⁰ E. Lamond (ed. and trans.), *Husbandry: together with an anonymous Husbandry, Seneschauscie and Robert Grosseteste's Rules* (London, 1890), p. 9; Campbell, *English seigniorial agriculture*, p. 121.

⁵⁴¹ Farmer, 'The *famuli*', pp. 211-4.

⁵⁴² TNA, SC 6/939/1, -940/11.

that at Alciston up to 15 *famuli* were involved in the harvest.⁵⁴³ It is indeed hard to quantify their contribution, but it must have been large enough to make the manager of Bromham manorial demesne give all *famuli* board from Lammas to Michaelmas.⁵⁴⁴ Overall, at a conservative level, at least 250 workdays were taken on by an ordinary ploughman for the year; and 300 days do not seem unreasonable. Counting in eight weeks of holidays and breaks as suggested by Walter of Henley, it appears that the ploughman was not allowed much idleness.⁵⁴⁵ Thus, it is reasonable to assume that for an ordinary *famulus*, who worked full-time across the year the employment was the only source of income.⁵⁴⁶

Regarding the composition of the salary package, during our period it mostly consisted of cash and grain, accompanied by a small number of perks. By focusing on the ploughmen's salary, and also the shepherds' for comparison, consistent data can be assembled. In the following discussion the Alciston case is presented as an example to illustrate the composition of the salary package and the changes in it. On this basis, I will try to construct an index of salaries using a broad sample to illustrate a different trend in comparison with the trend in casual wage rates.

Table 6.6 illustrates the composition of the salary package given to a full-time

⁵⁴³ ESRO, SAS/G44/87.

⁵⁴⁴ TNA, SC 6/1046/14, 18.

⁵⁴⁵ Lamond, *Husbandry*, p. 9; similar estimate is given by Karakacili, see, idem, 'English agrarian labor productivity', pp. 48-49.

⁵⁴⁶ Full-time employment of the shepherd has been demonstrated in Chapter 5.

ploughman and to a full-time shepherd at Alciston between 1400 and 1480. The full-time ploughman received a stipend (*stipendium*), board money (*vadium*) and the grain delivery (*liberacio*); the shepherd received the same components though the stipend might vary. Normally the grain delivery stood alone as a component of the package, but at Alciston and Lullington the grain delivery was issued over a period of 28 weeks between Michaelmas and Hockday; from Hockday to Michaelmas, board money was issued in place of grain for 24 weeks. It is quite unique because the same pattern was not used at Apuldram (West Sussex) and Bromham (Wilts.) belonging to the same landlord. The quantity and the composition of the salary package make them stand out from their part-time or fixed-term co-workers. For example, in 1444/5, two ploughmen hired to work between 28 September and 24 June in the next year received the full grain delivery plus the board money for ten weeks at 5s 10d each. The amount of board money and grain delivery was strictly determined by the number of weeks the *famuli* worked.⁵⁴⁷ This pattern proves that the *famuli* had a continuous presence on the demesne. And the last feature is that of these components, only the quantity of the stipend ever changed, whilst the others were fixed over our period. This feature is understandable from the fact that board money and grain delivery were issued in place of board. Variations of the package are found in different places, but the composition is much similar.

⁵⁴⁷ ESRO, SAS/G44/97.

| Table 6.6 Salary package of the ploughman and shepherd at Alciston, East Sussex | | | | |
|---|-----------|----------|------------------|---------------------------|
| | Stipend | | Board money | Grain delivery |
| | Ploughman | Shepherd | 7d per week × 24 | 1 bu barley per week × 28 |
| 1401 | 6s | 6s | 14s / 14s | 3 qrs 4 bu barley |
| 1405 | 6s | 4s | 14s / 14s | 3 qrs 4 bu barley |
| 1410 | 6s | 4s | 14s / 14s | 3 qrs 4 bu barley |
| 1414 | 6s | 4s | 14s / 14s | 3 qrs 4 bu barley |
| 1420 | 6s + 2s | 4s + 1s | 14s / 14s | 3 qrs 4 bu barley |
| 1425 | 6s + 2s | 4s + 1s | 14s / 14s | 3 qrs 4 bu barley |
| 1430 | 6s + 2s | 4s + 1s | 14s / 14s | 3 qrs 4 bu barley |
| 1435 | 6s + 2s | 4s + 1s | 14s / 14s | 3 qrs 4 bu barley |
| 1440 | 6s + 2s | 4s + 1s | 14s / 14s | 3 qrs 4 bu barley |
| 1445 | 8s | 8s | 14s / 14s | 3 qrs 4 bu barley |
| 1450 | 8s | 8s | 14s / 14s | 3 qrs 4 bu barley |
| 1456 | 8s | 8s | 14s / 14s | 3 qrs 4 bu barley |
| 1460 | 8s | 8s | 14s / 14s | 3 qrs 4 bu barley |
| 1466 | 8s | 8s | 14s / 14s | 3 qrs 4 bu barley |
| 1470 | 8s | 8s | 14s / 14s | 3 qrs 4 bu barley |
| 1475 | 8s | 8s | 14s / 14s | 3 qrs 4 bu barley |
| 1480 | 8s | 8s | 14s / 14s | 3 qrs 4 bu barley |
| 1485 | 8s | 8s | 14s / 14s | 3 qrs 4 bu barley |
| Source: ESRO, SAS/G44/55, 61, 68, 71, 77, 80, 83, 88, 93, 98, 103, 106, 109, 114, 118, 122, 127, 132. | | | | |

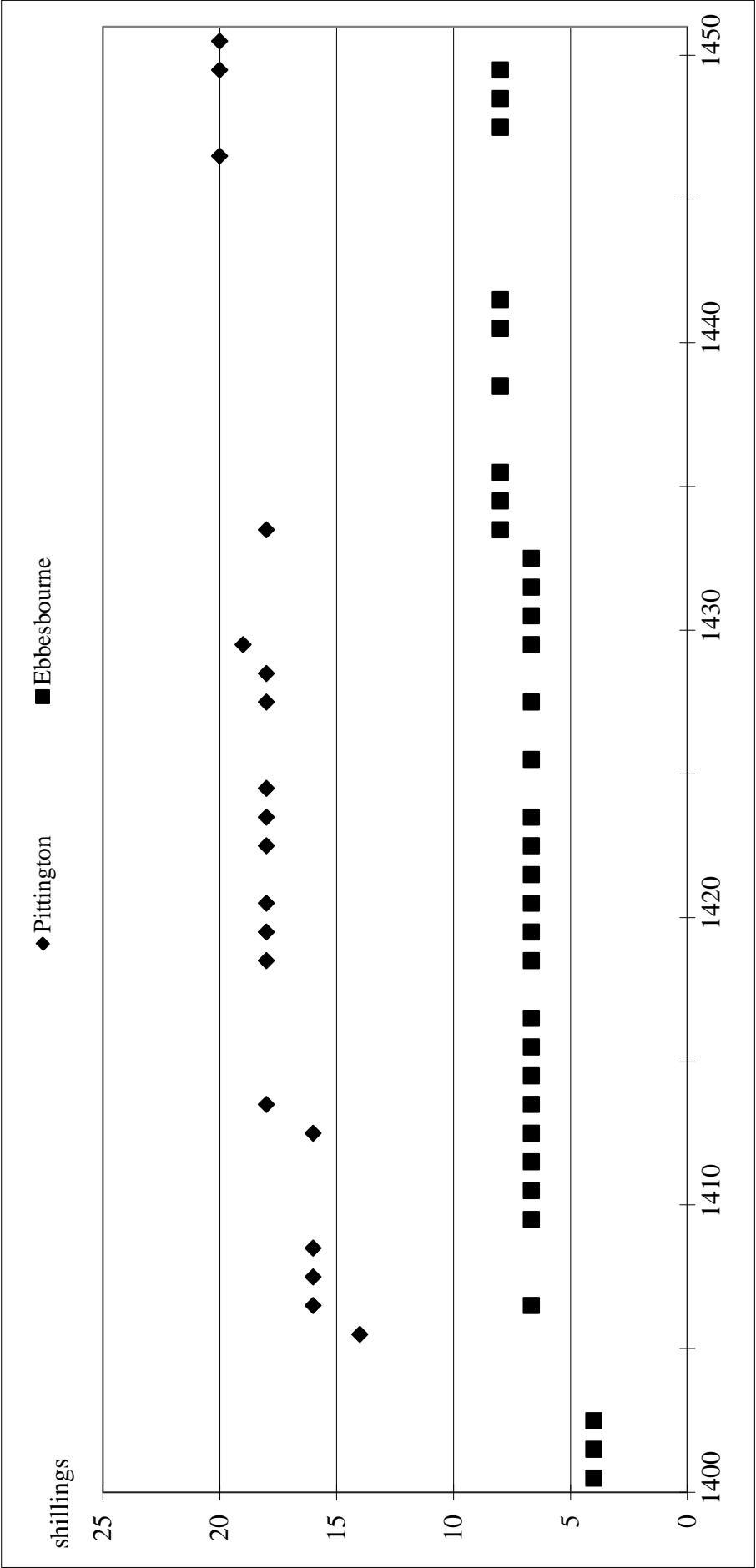
A potential trend is observed in the stipend on the Alciston demesne in Table 6.6.

Similar trends are also found in the stipends from other manorial demesnes. In Table 6.7, four cases are assembled using the data from the manorial demesnes in north-east, south-east, and south-west England to present the value of stipends given to untitled ordinary *famuli*, to shepherds and to the ploughing staffs that include ploughmen, plough-drovers, and oxherds. As stated, they were the ordinary physical labourers working full-time. The first feature in the Table is wage-stickiness. The same wage rate was used for an extended period. But the pattern of wage-stickiness is different

from the stickiness in casual wage rates, because it rose though slowly. The second feature indicating that the *famuli* employed in the same posts on the same demesne might receive different stipends, even though a permanent rising trend is clear, as in the above Alciston case. Chart 6.9 is produced to highlight the rising trend. It has to be emphasised that the rising trend is not universal, but nearly. In the two fragmented series of accounts from Tavistock Abbey estates at Hurdwick (Devon) and Werrington (Cornwall) the wage rate was steady over this period; but the increase occurred in

| Table 6.7 Ploughmen and shepherds and their salaries in the fifteenth century (the number of <i>famuli</i> × the salary received by them) | | | | | |
|---|------------------------|--------------------------------|--------------------------------|-------------|------|
| | 1400 | 1425 | 1450 | 1475 | 1500 |
| Pittington | | | | | |
| <i>Famuli</i> | 3 × 16s* | 1 × 20s* 3 × 18s 1 × 19s | 4 × 20s | - | - |
| Lullington | | | | | |
| Ploughing staffs | 9 × 6s | 5 × 8s | 5 × 8s | - | - |
| shepherds | 2 × 5s 2 × 4s | 2 × 8s 2 × 6s | 1 × 10s 1 × 8s 1 × 6s 8d | - | - |
| Ebbesbourne | | | | | |
| Ploughing staffs | 3 × 4s | 3 × 6s 8d | 1 × 13s 4d 2 × 8s | - | - |
| Shepherds | 2 × 6s 8d 1 × 3s 6d | 3 × 6s 8d | 3 × 10s | - | - |
| Longbridge Deverill** | | | | | |
| Ploughing staffs | 1 × 10s | 1 × 13s 4d | 1 × 20s 1 × 12s | 2 × 20s* | - |
| Shepherds | - | 1 × 13s 4d 1 × 10s | 1 × 13s 4d 1 × 10s | 2 × 13s 4d* | - |
| Note: * The figure is not available in this year. Therefore the figure of the previous nearest year is used. | | | | | |
| ** The account before 1420 is not available. But the manorial demesne at Longbridge Deverill had been sharing ploughing staffs with the glebe that paid a half of the stipend and grain delivery. The wage data, thus, were collected from the glebe's account. | | | | | |
| Sources: DCDM, PAR 1399/40, 1424/5, 1450/1; TNA, SC 6/1025/10, -1026/9, -1027/3; SHC, T\PH\lon/2/6/9818, -7/9955, 9959, -8/9605, -10/9873. | | | | | |

Chart 6.9 The trend in stipends on the Pittington, Durham, and on the Ebbesbourne, Wiltshire, manorial demesnes, 1400-1450



Sources: DCDM, Pittington, 1405/6-1450/1; HRO, 11M59/B1/150-187.

the 1390s at Werrington.⁵⁴⁸ At Elvethall, apparently, the wage rate rose during the long gap of the series between 1392 and 1424.

The grain delivery is a more valuable part of the salary package. Given that a quarter of barley was worth 3s, for example, the value of the grain delivery issued to a ploughman on the manor of Ebbesbourne was about 13s, larger than the value of stipend that was only 4s in 1400/1 and only 8s in 1451/2. If the grain was wheat, the value could be higher. Therefore, the value of grain delivery must be taken into consideration. There were at least four different patterns used in this century. The Alciston pattern that separates the issue into board money and grain delivery was used at Lullington, which was another Battle Abbey estate about three miles from Alciston. Elsewhere, the commonest pattern is that the grain was a stand-alone issue consisting fully of one or two types of grain. On Winchester manors, the grain was barley, issued one quarter each ten weeks. At Pittington the *famuli* received wheat, but only one quarter every twelve weeks. At Longbridge Deverill, a mixture of half wheat and half barley was given at one quarter every twelve weeks. Another pattern is found at Hurdwick and Werrington, where the grain was converted into cash and the title of board money was omitted as it had become an integral part of stipends before our period. The most interesting pattern is found at Ormesby St Margaret. Like Apuldram, on this demesne the *famuli* normally boarded in the household without receiving a

⁵⁴⁸ DRO, D52/1 Werrington 1393/4, 1397/8.

grain issue, as it is recorded ‘In grain deliveries of *famuli* none issued this year because all *famuli* remain boarding at the lord’s table’.⁵⁴⁹ In 1434/5, for an unknown reason, the ordinary *famuli* were not boarding, but receiving board money for about 8*d* each week for the year; again in 1452/3, the *famuli* spent eight weeks at the lord’s table and received 8*d* each week for the other 44 weeks of the year.⁵⁵⁰ This temporary arrangement explains how the value of board money was estimated. Moreover, on a few occasions certain *famuli* did not board in the household, but received grain deliveries for one bushel of barley per week.⁵⁵¹ The implication is that one bushel each week is an equivalent value of board, issued for consumption. This may explain why during this period the quality and quantity of grain delivery were fixed at the rate of one quarter of grain per eight weeks, per ten weeks, or per twelve weeks and remained unchanged as illustrated in Table 6.8.

Table 6.8 The grain delivery given to the ordinary *famuli*

| | c. 1400 | c. 1425 | c. 1450 | c. 1475 | c. 1500 |
|---------------------|---------------------|----------------------------------|----------------------------------|----------------------------------|-------------------------------|
| Elvethall | | 1qr (wheat & rye) /12weeks | 1qr (wheat & rye) /12weeks | 1qr (wheat & rye) /12weeks | 1qr (wheat & rye) /12weeks |
| Alciston | 1bu barley /week | 1bu barley /week | 1bu barley /week | 1bu barley /week | |
| Longbridge Deverill | | 1qr (wheat & barley) /12weeks | 1qr (wheat & barley) /12weeks | 1qr (wheat & barley) /12weeks | |

Note, data of the years nearest to the quarter-century are used when the data of the dates are not available.

Sources: DCDM, EAR 1424, 1450, 1474, 1591; ESRO, SAS/G44/56, 77, 103, 122; SHC, T\PH\lon/2/6/9818, -7/9959, -10/9873.

⁵⁴⁹ ‘In liberationibus famulorum nichil hoc anno quia omnes famuli steterunt ad mensam domini hoc anno’, TNA, SC 6/940/6.

⁵⁵⁰ TNA, SC 6/939/10, -940/11.

⁵⁵¹ TNA, SC 6/939/1-3.

Lastly, there were random perks issued for various reasons and many perks were insignificant. For example, at Lullington the *famuli* were paid 2s for carrying grains to nearby settlements.⁵⁵² Sometimes gifts were given for the holiday, like the offerings (*oblaciones*) at Christmas and Easter at Alciston or the goose money at Elvethall.⁵⁵³ Their amount was insubstantial and can be ignored in the analysis. But there were considerable perks issued in the form of ‘clothing deliveries’ (*toga*). As at Apuldram and Bromham, a *toga* worth 4s was issued to every *famulus*; similarly, a ‘gift and concession’ of 2s was given at Alciston until 1441/2.⁵⁵⁴ This was probably a way to cover increments in the stipend when the manager was under pressure to increase the wage rate. Eventually, at Alciston, the gift was removed from the record when the stipend was officially increased by 2s in 1441/2.⁵⁵⁵ In practice, this type of perks was a part of the salary package, whilst other types were inconsiderable.

This source material provides two sets of consistent data – the stipend and the grain delivery. The body of the stipend is cash, which is easy to quantify. The board money, in cases where it is given, may be analysed with the stipend. The body of the grain delivery, however, is grain. Comparison between the stipend and the grain delivery requires price data for the conversion of grain quantities into their cash equivalents, or reversely. For this purpose, Farmer’s price series are an effective tool.

⁵⁵² TNA, SC 6/1026/4.

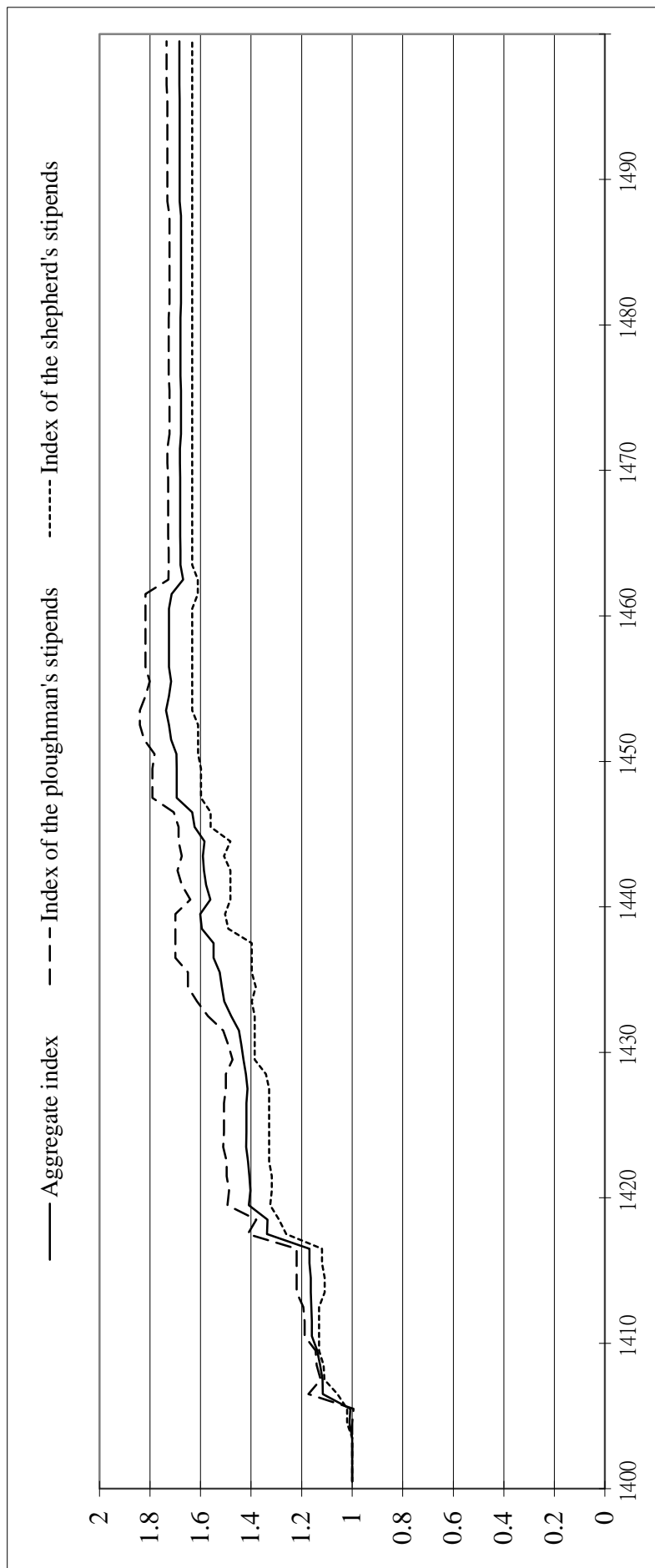
⁵⁵³ ESRO, SAS/G44/93; DCDM, EAR, 1424-91.

⁵⁵⁴ TNA, SC 6/1018/4; SC6/1047/18; ESRO, SAS/G44/72, 94.

⁵⁵⁵ ESRO, SAS/G44/93.

Lastly, it has to be remembered that the data relating to stipends might be consistent but they are far from perfect because of the fragmented source material. In order to avoid sampling errors, gaps between discontinuous records are filled with the value of the nearest year previous, rather than left blank. With these data, three charts are created to illustrate three intriguing divergences. Chart 6.10 is composed using only the data of stipends, demonstrating a clean rising trend in the ploughman's and the shepherd's stipends. Up to the middle of this century, the ploughman's cash income was increased up to 170% of the level of 1400, and stayed steady thereafter. By including the cash value of the grain delivery, Chart 6.11 is produced to reveal the trend in the cash value of the total package, curiously showing that its cash value is slightly lower in the middle of this century. Chart 6.12 illustrates the equivalent grain value of the salary package by converting the stipend into grain on top of the grain delivery. That is, in the middle of the fifteenth century the salary package is worth about 30% more grain than the one in 1400.

Chart 6.10 The index of stipend paid to the *famulus* over the fifteenth century.

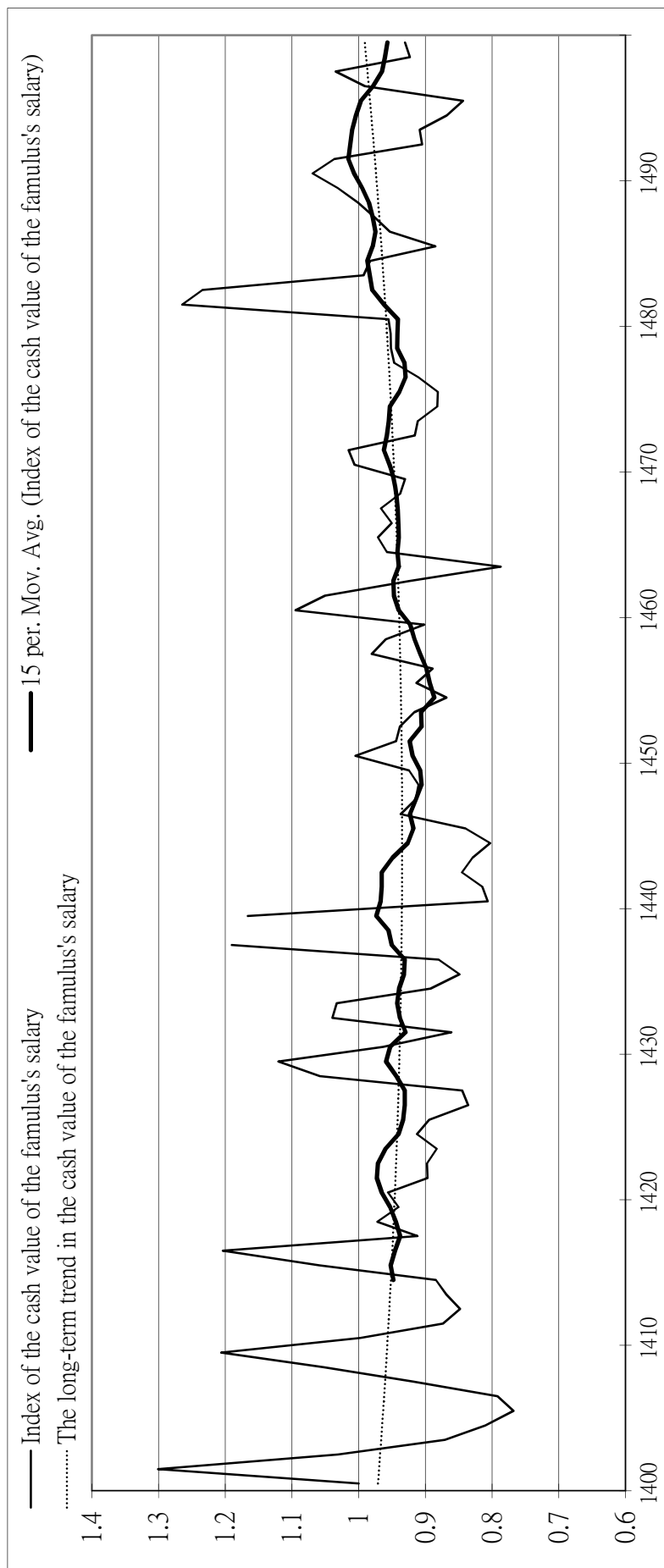


Note: The start point of this index is the average of the sample data of 1400/1. All the other data are divided by it to produce the index.

Samples: The demesne manors at Alciston, Apuldrum, Ebbesbourne, Eccinswell, Elvethall, Harwell, Hurdwick, Longbridge Deverill, Lullington, Merdon, Pittington, Werrington, and Woolstone.

Sources: HRO, 11M59/B1/150-191; SHC, T\PH\lon/2/6/9815-6, 9818-21, 9823-6, 9829, 9830-3, 9835-41, 9869-70, 9872, 9874-7, 10613, 10615, 10708-9, T\PH\lon/2/7/9940-2, 9944-62, 9964; ESRO, SAS/G44/56-139; TNA, SC 6/1017/17-1019/20; TNA, SC 6/1025/10-1027/16; DCDM, EAR 1424-1528; DRO, D52/1 Hurdwick 1462-1497.

Chart 6.11 The index of *famulus*'s salary package calculated in cash over the fifteenth century

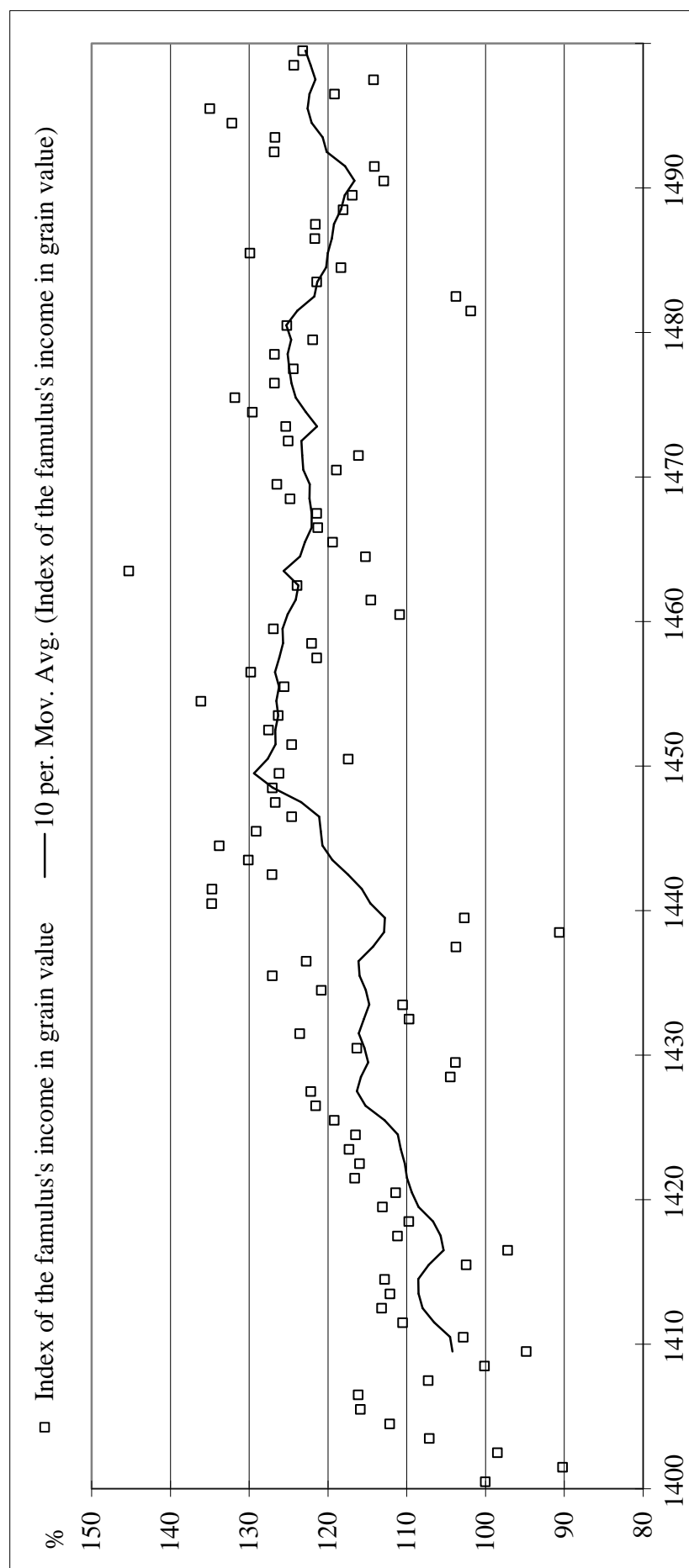


Note: The start point of this index is the average of the sample data of 1400/1. All the other data are divided by it to produce the index.

Samples: The demesne manors at Alciston, Ebbesbourne, Ecchinswell, Elvethall, Longbridge Deverill, Pittington, and Woolstone.

Sources: HRO, 11M59/B1/150-191; SHC, T\PH\lon/2/6/9815-6, 9818-21, 9823-6, 9829, 9830-3, 9835-41, 9869-70, 9872, 9874-7, 10613, 10615, 10708-9, T\PH\lon/2/7/9940-2, 9944-62, 9964; ESRO, SAS/G44/56-139; TNA, SC 6/1017/17-1019/20; TNA, SC 6/1025/10-1027/16; DCDM, EAR 1424-1528; DRO, D52/1 Hurdwick 1462-1497.

Chart 6.12 The index of the *famulus*'s income calculated in grain over the fifteenth century



Note: The start point of this index is the average of the sample data of 1400/1. All the other data are divided by it to produce the index.

Samples: The demesne manors at Alciston, Ebbesbourne, Ecchinswell, Elvethall, Longbridge Deverill, Pittington, and Woolstone.

Sources: HRO, 11M59/B1/150-191; SHC, T\PH\lon/2/6/9815-6, 9818-21, 9823-6, 9829, 9830-3, 9835-41, 9869-70, 9872, 9874-7, 10613, 10615, 10708-9; SHC, T\PH\lon/2/7/9940-2, 9944-62, 9964; ESRO, SAS/G44/56-139; TNA, SC 6/1017/17-1019/20; TNA, SC 6/1025/10-1027/16; DCDM, EAR 1424-1528; DRO, D52/1 Hurdwick 1462-1497.

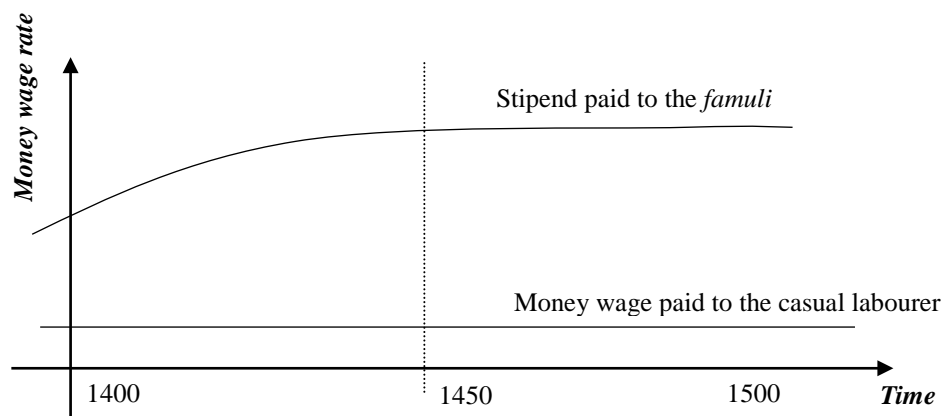
The charts suggest three conclusions. The sharp rising trend in stipends over the first half of the fifteenth century in Chart 6.10 suggests that the annual cash income of the *famulus* increased by about 70%. Since, supposedly, the labourer made the choice between the yearly contract and casual employments, the implication is that labourers could earn more in the casual sector than in servanthood so that the stipend had to be improved to keep up with the market price of labour. Chart 6.11, however, suggests an opposite trend that is slightly moving downward when the value of grain delivery is considered. Could this mean that the *famulus*'s income was actually falling in accordance with the price level of grain and that the stipend rose in compensation for the falling price of grain? Chart 6.12 provides a contradiction to the implication of Chart 6.11. The purchasing power of the salary package on grain increased about 30% during a period of fifty years. 30% means an increment of about 2qrs of barley at Alciston; at Ebbesbourne and Ecchinswell it is about 1.5qrs. These are considerable amounts of grain. Considering these controversies, the question is if there was a genuine rising trend in *famulus*'s salary that might reflect the expansion of casual job opportunities.

6.3 Socio-economic implications of the divergences

Chart 6.10 highlights the divergence between the trend in casual wage rates and the one in the *famulus*'s stipends. Regarding the casual wage rate, after the major leap in the late fourteenth century, it remained mostly steady on the sample demesnes during the fifteenth century despite repeated economic impacts. Yet during the same period the *famulus*'s stipend increased nearly 70% and reached the peak in the middle of this century. Parliamentary legislation provides further evidence for the divergence. As illustrated in Table 6.9 the limits of stipends given in the 1388 legislation were nearly doubled in the 1445 legislation. But by 1388 the casual wage rate observed in the local labour market was very close to the stipulated rate in 1445 already.⁵⁵⁶ The divergence is expressed in Chart 6.13. Nevertheless, since the value of the grain delivery is usually larger than the stipend, during a period of low grain price the value of grain delivery depreciated the total value of the salary package. What does the rising trend in stipends stand for? Is it only a compensation for the falling price of the grain delivery rather than a genuine improvement of income?

⁵⁵⁶ N. Ritchie, 'Labour conditions in Essex in the reign of Richard II', *Economic History Review*, 2nd ser., 4 (1934), pp. 431-432, 444; W. O. Ault, *Open-field husbandry and the village community: a study of agrarian by-laws in medieval England* (Philadelphia, 1965), pp. 55, 72, 80, 95.

Chart 6.13 Divergent movements between the casual wage rate and the stipend of the *famuli* in fifteenth-century England



| Table 6.9 Wage regulations related to the <i>famuli</i> | | | |
|---|--------|-------------------------------------|---------------------|
| 1388 (12 ^o Ric II c. 4) | | 1445 (23 ^o Hen VI c. 12) | |
| Bailiff | 13s 4d | Bailiff | 23s 4d + 5s clothes |
| Master hine | 10s | Master hine | 20s + 4s clothes |
| Carter | 10s | Carter | 20s + 4s clothes |
| Shepherd | 10s | Chief shepherd | 20s + 4s clothes |
| Oxherd | 6s 8d | Common servant | 15s + 4s clothes |
| Cowherd | 6s 8d | Woman servant | 10s + 4s clothes |
| Swineherd | 6s | Under age 14 | 6s + 3s clothes |
| Woman labourer | 6s | | |
| Dairymaid | 6s | | |
| Plough-driver | 7s | | |
| Sources: <i>Statutes of the Realm</i> , 2, pp. 57, 338. | | | |

This question can be answered by examining the value of the *famulus*'s salary package during this century. When a labourer chose between a long-term contract and casual hire, he compared the salary package with the potential income he could earn in casual hire and picked up the better one, especially during a period when job

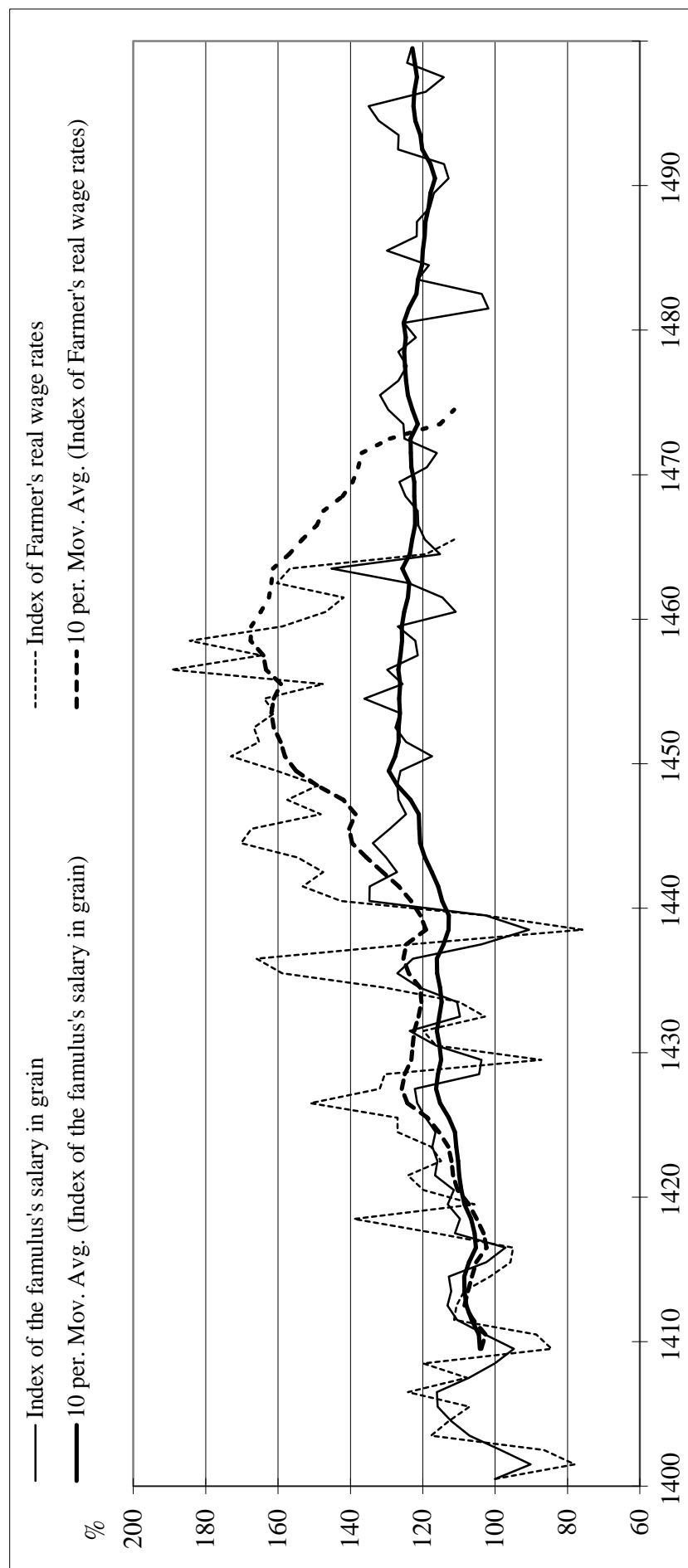
opportunities were relatively abundant in the casual sector and the wage was high. Therefore, we would expect to see that the overall value of the salary package was increasing in one form or another. The rising trend is observable from four aspects. First, although without changes in money wage rates, the rather high purchasing power of the casual wages created relative labour shortage in the servant job market, forcing the employer to improve the value of the salary package. Secondly, it seems that the improvement in the salary package happened in the component that was disposable, i.e. stipends. Thirdly, generally speaking, the overall value of the salary was falling since c. 1300 in accordance with the falling price of grain, but in this century the trend was checked and turning around as shown in Chart 6.11. Lastly, there are indeed cases illustrating genuine rising trends in the cash value of the salary package.

In terms of purchasing power of the salary package, Chart 6.12 demonstrates that the *famulus* was able to buy more and more grain during the first half of this century. This trend is the evidence that the *famulus*'s living standard was increasing. When comparing this trend with the rising trend in real wage rates in the casual sector, we find a link between the two sets of data. It has been emphasised that the data of salary and the data of casual wages stand for two different statistical bases. In this context, the rising purchasing power of the *famulus*'s salary means the rising amount of grain

could be bought over the year. The rising casual real wage rate stands for how much more grain could be bought using the wage paid for finishing one piece of work. Since there is no indication of how many pieces of work were finished by the labourer, there is no information of how much grain was bought by a casual labourer over the year. Nevertheless, there is a clear message that, when the real wage rate was especially high in a market, labourers could maintain the same living standard more easily or even improve the living standard when there were opportunities. This, thus, constituted a mechanism that diverted labourers from one job market to the other. Combining Chart 6.3 and 6.11, Chart 6.16 is produced to demonstrate an interesting feature. There was a steep rising trend in casual real wage rates in the first half of the fifteenth century. It is supposed that the casual labourer did the same amount of work across this period. Although without increase in the money wage rate, the purchasing power of his annual income improved significantly more than the purchasing power of the *famulus*'s salary.⁵⁵⁷ The steep rising trend and the large increment in casual real wage rates suggest that there was a vibrant casual labour market where labourers could make a living more easily than serving as the *famuli* whose salary increased too but relatively slowly and smaller in terms of purchasing power. Any labourer who was allowed to make own choice would prefer casual hire to servanthood. The employer who wanted to hire the *famuli* should feel the pressure to improve the job offer.

⁵⁵⁷ The sharp falling trend after 1460 is a result of lack of data. Please ignore the falling trend in Chart 6.16.

Chart 6.14 The comparison between the trends in the purchasing power of the *famulus*'s salary and of the casual wage rate



Samples: The demesne manors at Alciston, Ebbesbourne, Ecchinswell, Elvethall, Longbridge Deverill, Pittington, and Woolstone.

Sources: HRO, 11M59/B1/150-191; SHC, T\PH\lon/2/6/9815-6, 9818-21, 9823-6, 9829, 9830-3, 9835-41, 9869-70, 9872, 9874-7, 10613, 10615, 10708-9, SHC, T\PH\lon/2/7/9940-2, 9944-62, 9964; ESRO, SAS/G44/56-139; TNA, SC 6/1017/17-1019/20; TNA, SC 6/1025/10-1027/16; DCDM, EAR 1424-1528; DRO, D52/1 Hurdwick 1462-1497.

Moreover, the roles of the stipend and the grain delivery in the salary package must be examined. Evidence implies that the grain delivery was issued for a purpose. It shows that the amount of grain delivery was about the right amount for the consumption of the *famulus*. At Ormesby St Margaret, where the ordinary *famuli* were usually boarding in the household, in 1423-5 Alex Bere boarded for eight weeks and received grains for the other 44 weeks at one bushel of barley per week.⁵⁵⁸ It suggests that one bushel per week was an equivalent amount of food consumed by a *famulus*. Similarly, at Apuldram, the *famuli* boarded on the demesne, but in 1432/3 a shepherd received one bushel of barley each week for 39 weeks.⁵⁵⁹ Elsewhere, how the grain delivery was disposed of is not clearly indicated, but it is plausible that it was likely consumed, because many full-time *famuli* did not have productive holdings and some were youthful workers living away from the parental homes.⁵⁶⁰ This explains why in this century the quantity and quality of the grain delivery rarely changed. Thus when the employer decided to improve the salary package in order to keep up with competition for labourers, the change was made in the stipend, or in 'gifts' that were cash payments like stipends. Between c. 1424 and 1449, at Ormesby St Margaret, the ploughman's stipend varied between 13s 4d and 20s with full board.⁵⁶¹ At Apuldram,

⁵⁵⁸ TNA, SC 6/939/1-3.

⁵⁵⁹ TNA, SC 6/1018/5.

⁵⁶⁰ P. J. P. Goldberg, 'Migration, youth and gender in later medieval England', in P. J. P. Goldberg and F. Riddy (eds.), *Youth in the middle ages* (York, 2004), pp. 85-99.

⁵⁶¹ TNA, SC 6/939/2 – SC 6/940/9.

since 1432 most *famuli* boarded on the demesne receiving a stipend varying between 13s and 21s including the clothing delivery; and it was eventually stabilised at 20s in c. 1444.⁵⁶² Indeed, the *famuli* who had own holdings were likely to sell the grain; and the landless ones might want to sell a small part of it to purchase meat and vegetables. In these cases, if they asked for compensation for the falling price of grain, the change would only happen in the stipend. Although the stipend represents a small part of the salary, it was the component that was manipulated by the employer. Therefore, when a rising trend is observed in the stipend, it represents the efforts to increase the overall value of the salary package.

The falling price of grain was a major disadvantage to serving as *famuli*. Since c. 1300 till the middle of this century, the cash value of the grain delivery on the Winchester estate, where the quantity and quality of it remained the same, had fallen approximately 20%.⁵⁶³ L. Poos and P. J. P. Goldberg have suggested that because a major component of the *famulus*'s salary package was grain, the low price level of grain gave a reason to the employers to replace casual labourer with the *famuli*, as happened in the early modern period.⁵⁶⁴ Thus, we may expect that the employer hired

⁵⁶² TNA, SC 6/1018/5 – SC 6/1019/20.

⁵⁶³ For the general trend in prices, please see Farmer 'Prices and wages, 1042-1350', p. 790, and idem, 'Prices and wages, 1350-1500', p. 504. It might be worth noting that in c. 1450 the price level of barley was very low at Ebbesbourne at about 3s per quarter. The price lowered the value of the salary package of a ploughman in 1451/2 to 23.5s even though the cash salary was 8s. Comparatively, in 1301/2 the ploughman at Ebbesbourne had quittance of rent 2.5s receiving a quarter of barley every 10 weeks like in 1451/2. The package was worth about 23.2s, of which a quarter of barley was worth about 4s. In the 1451/2, the cash salary of a ploughman was 8s and the total value of the salary was 23.5s. M. Page, *The pipe roll of the bishopric of Winchester, 1301-1302, Hampshire Record Series, 14* (Winchester, 1999), pp. 71, 72, 75; HRO, 11M59/B1/188.

⁵⁶⁴ P. J. P. Goldberg, 'What was a servant', in A. Curry and E. Mathew (eds.), *Concepts and patterns of service in*

the *famuli* to work in the tasks which had normally been done by casual labourers.

However, there is little sign of the employer being able to take advantage of the low price of grain. Firstly, there was no expansion in hiring the *famuli*. Over the period between 1400 and 1454 at Ebbesbourne, two ploughmen and three shepherds were hired each year; and the number remained the same.⁵⁶⁵ Elsewhere, the change in their number was only found when the sown acreage was changed.⁵⁶⁶ Secondly, the *famuli* did not seem to be replacing casual labourers, as far as the cost of labour shows. At Ebbesbourne, they were not involved in threshing or reaping at all; and when labour services were reduced on the demesne it was casual labourers rather than the *famuli* fulfilling the vacancies, as has been demonstrated in Chapter 4. Presumably, when the employer wanted to exploit the low price of grain, the employee wanted to take advantage of labour shortage and forced the employer to improve the offer. Since the market was in favour of the employee, the employee's intention explains the turnaround in the downward trend in Chart 6.11, demonstrating that there was a force negating the effects of the low price of grain and the force is observed in the rising level of stipends. The employee's ability to demand better offers suggests that it was relatively difficult to find and hire the *famuli*, or the phenomenon reported by Poos

the later middle ages (Woodbridge, 2000), pp. 18-19; Poos, *A rural society*, pp. 222-3.

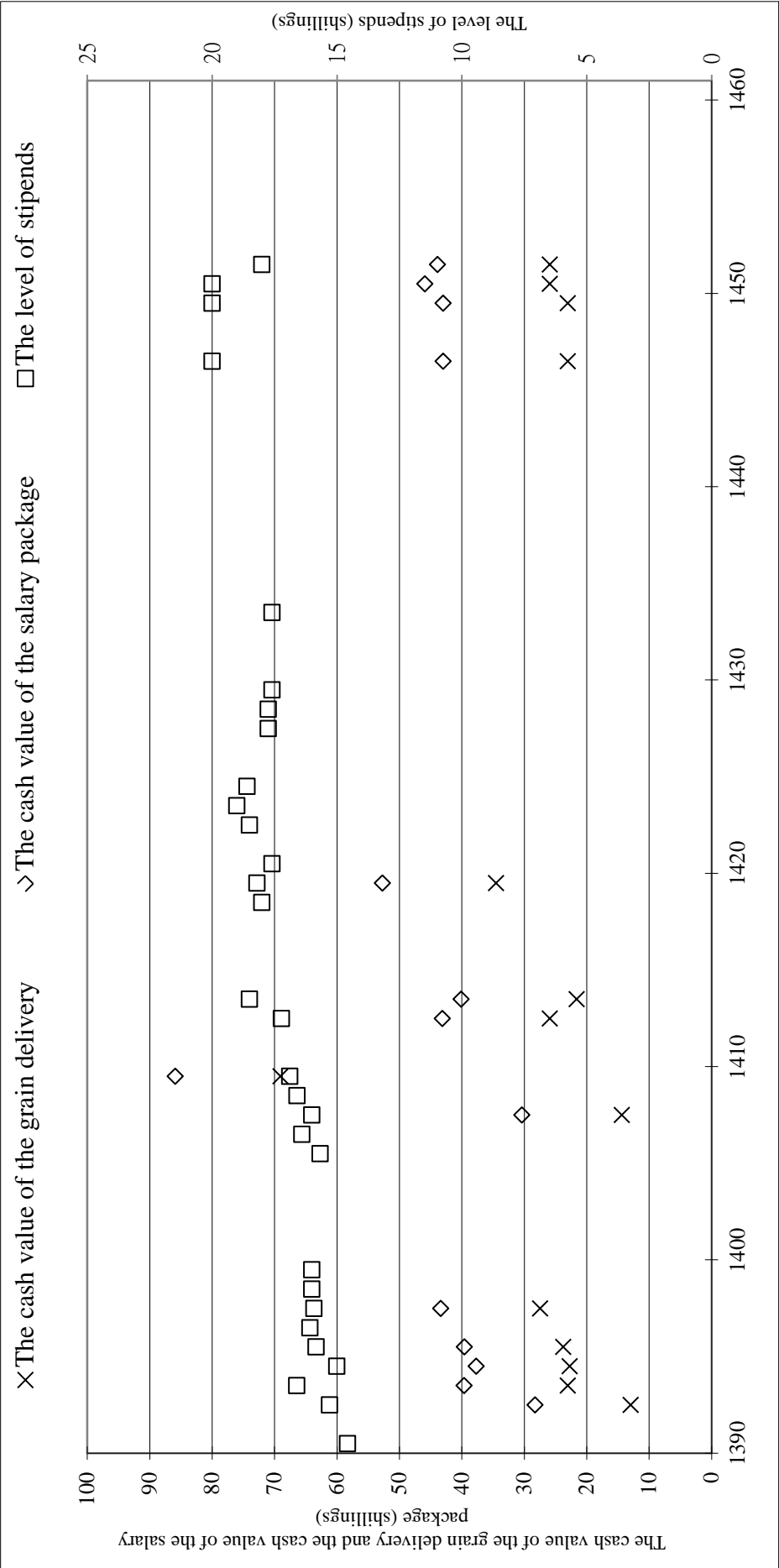
⁵⁶⁵ HRO, 11M59/B1/150-191.

⁵⁶⁶ For example, at Alciston in 1401/2 ten ploughmen and one harrower worked together for the year. In 1450/1, when the sown acreage was gradually reduced from around 330 acres to 260 acres, the number was reduced to eight. ESRO, SAS/G44/56, 103.

and Goldberg might happen.

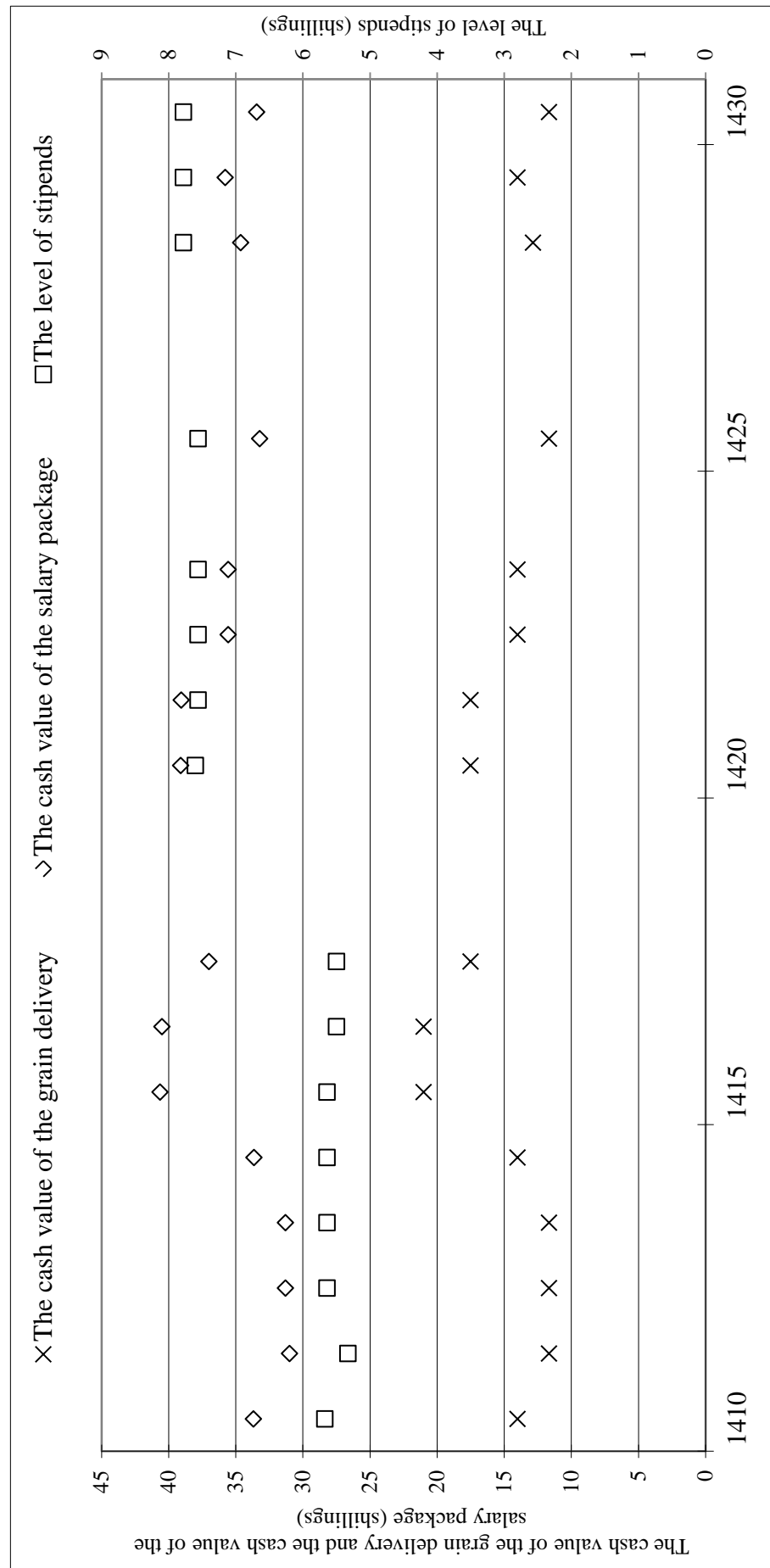
Lastly, some local cases illustrate rising trends in stipends when the local price of grains was stable or, even, rising, demonstrating genuine increases in the value of the salary package. At Pittington, as shown in Chart 6.14, the stipend increased in the 1390s, *c.* 1410, and the 1440s, when the quantity and quality of the grain delivery remained at one quarter of wheat every twelve weeks. The local price level of wheat fluctuated at a high ground from 1390 to 1450 without a visible downward trend as illustrated in Chart 6.14. During the same period, the average stipend rose from about 15s to 20s. It is noteworthy that in 1450 the stipend on this demesne was higher by 4s than on the Elvethall demesne, which is only three miles away and which belonged to the same lord; and even in the casual sector threshing a quarter of barley was $\frac{1}{2}d$ higher than at Elvethall. The speculation is that because Elvethall is adjacent to Durham city labour supply was relative abundant; in contrast, at Pittington the manager had to pay more to attract labourers. The other case is from Lullington, East Sussex, in Chart 6.15. The chart illustrates that in the latter half of the 1420s, when the price level of grain was fairly high, the stipend increased. When the cash value of grain delivery fell in the 1420s, the stipend remained unchanged, implying that the price level of grain was irrelevant to the rising trend in stipends on this demesne. The two cases show the possibility that the stipend might rise for its own purpose, as had

Chart 6.15 The cash values of the salary package on the Pittington manorial demesne, Durham, 1390-1460



Source: DCDM, PAR 1390-1451.
Note: for the prices of grain please see Appendix 2.

Chart 6.16 Values of the salary package on the Lullington manorial demesne, East Sussex, 1410-1430



Source: TNA, SC 6/1025/19-26, -1026/2-13.

Note: for the prices of grain please see Appendix 3.

happened in the wake of the Black Death at Cuxham where the ploughman's stipend was triple the 1347/8 level when the quality of grain delivery also increased.⁵⁶⁷

The rising trend in the purchasing power of the *famulus*'s salary package is thus confirmed and the rising purchasing power is mainly contributed by the rising stipend, which was the *famulus*'s disposable income. It has also been demonstrated that the rising trend in stipends was not only a compensation for the falling price of grain, but also a result of the market economy. It reflects the attractions from the casual job market. The high purchasing power of casual wages was certainly an attraction. Moreover, the rising real wage rate suggests that, during the first half of the fifteenth century, the same amount of work was undertaken by a reducing number of labourers. Casual job opportunities were expanding for existing casual labourers and for those who wanted to be casual labourers. The rising level of the *famulus*'s stipends reflects the rising expectations on casual hire. From the rising trend in stipends and the falling price level of grain, we see the shear movement that should appear during labour shortage. This finding raises the last question – whilst both were issued in cash, why was the *famulus*'s stipend more flexible than the casual labourer's money wage rate? It may be argued that the high real wage rate during this period might ease the labourer's eagerness for higher money wage rate; but one should not miss the

⁵⁶⁷ P. D. A. Harvey (ed.), *Manorial records of Cuxham, Oxfordshire circa 1200 – 1359, Oxfordshire Record Society Publications 50* (1976), pp. 435, 440, 578, 584.

long-lasting stickiness in money wage rates during the latter half of the fourteenth century in Beveridge's chart of threshing and winnowing wages on the Winchester manors.⁵⁶⁸ It appears that casual wage rates tended to remain steady for extended periods. The divergent movements between the two sets of data could inspire a number of interpretations, but focusing on the management of labour, it seems that job negotiation made a considerable difference in employment.

In the terms of employment of the *famuli*, discounted stipends and fixed-term hire that represent *ad hoc* arrangements are easy to find in the manorial account. At Pittington, for example, in 1424 five full-time *famuli* were employed, of whom one received 20s, one received 19s, and three took 18s. One year before, four were hired, among whom two received 20s and two were paid 18s.⁵⁶⁹ And in 1427/8, two *famuli* received clothes worth 9s altogether, which were 'conceded in the agreement'.⁵⁷⁰ At Apuldrum, in 1431 three yearly ploughmen were paid 13s 4d with 4s clothing delivery (*toga*) each; in the other year, 16s was paid to them plus a clothing delivery of 4s except one who received 3s 6d *toga*; in the year after, one received 16s and the other 17s, both with the delivery of 4s, but the third one received 10s with 3s clothes money.⁵⁷¹ Regarding the period of work, at Pittington in 1408/9, among seven full-time *famuli* John of South Pittington worked from Martinmas to 1 August

⁵⁶⁸ Beveridge, 'Winchester manors', pp. 38-39.

⁵⁶⁹ DCDM, PAR, 1423, 1424.

⁵⁷⁰ 'concessum in conduccione', DCDM, PAR, 1427.

⁵⁷¹ TNA. SC 6/1018/4-6.

receiving 12s and John Chikyn the swineherd worked from the feast of St Cuthbert in March to Martinmas receiving 6s.⁵⁷² During local market disorders, oddities were more likely to emerge. A revealing arrangement in 1440 at Alciston and in the five years afterwards gives evidence of the influence of economic impacts on the *famulus*'s contract. The Alciston demesne used one of the largest groups of *famuli* in fifteenth-century England keeping nine full-time ploughmen until 1441. In the year of 1440/1 the manor was ravaged by pestilence that killed several *famuli*. In the following year the manager kept six yearly contracts and handed out four fixed-term part-time contracts.⁵⁷³ The chaos remained until 1446/7, when all contracts returned to the ordinary annual arrangement.⁵⁷⁴ The implication is that, in comparison with the permanent 'leap' in casual wage rates, sequential 'ripples' are easier to observe in contract labour through negotiation.⁵⁷⁵

When job negotiation is applied to the casual labour market, similar flexibilities are found. There were two types of contracts used in the harvest. One is reported by Dyer and Penn, who found that some sorts of middlemen were active in the rural labour market in the latter half of the fourteenth century taking advantage of labour

⁵⁷² DCDM, PAR 1408.

⁵⁷³ One was hired from Easter to First of August, one from Michaelmas to 24th of June, and two from Michaelmas to Pentecost.

⁵⁷⁴ ESRO, SAS/G44/93-99.

⁵⁷⁵ S. A. Epstein, 'The theory and practice of the just wage', *Journal of Medieval History*, 17 (1991), pp. 53, 54, 58-60.

shortage.⁵⁷⁶ The case was recorded only because it was brought to court. Agency in this case only makes sense if the activity was done by preset contract; otherwise the workers were breaking the law for uncertainties. This may explain why on many estates the harvest expense was recorded in bulk. The other type of negotiation is found on Norfolk demesnes where harvesters were hired to work for the whole season. For example, at Ormesby St Margaret in the summer of 1425, 34 labourers were hired, of whom 17 did reaping and mowing for four weeks, assumed to be 24 days. Mowers by contract, *e.g.* John Deye, received $4\frac{1}{2}d$ as the daily average, but mowers by day, *e.g.* Galfrid Smyth and Hugo Maward, received $6d$ each day. The best reapers by contract received $4d$ as the daily average that was equal to the wage given to day-reapers; but the majority of contract reapers received $3\frac{1}{2}d$ or $3\frac{3}{4}d$.⁵⁷⁷ In this contract, the upper limit of the wage was mostly fixed at $8s$, as in table 6.10, but the lower limit of the wage varied frequently. In 1425, the minimum wage was $7s$; ten years later two workers received $6s\ 9d$ and $6s\ 8d$. Those who received low wage rates were all men. It is tempting to imagine that they were adolescent who were less physically capable.⁵⁷⁸ The varying wage rate suggests that the pay was set up individually with the labourer in consideration of his or her physical capacity, providing a pattern rather different from the steadiness wage rate paid for piece-work

⁵⁷⁶ Dyer and Penn, 'Wages and earnings', p. 365.

⁵⁷⁷ TNA, SC 6/939/2.

⁵⁷⁸ TNA, SC 6/939/1, 10; Poos, *A rural society*, p. 215.

or day-labour.

Table 6.10 Harvest contract labourers' wages on the Ormesby St Margaret demesne, Norfolk, 1425

| |
|---|
| John Lesyngham, reaper (<i>metens</i>) full season (<i>per totum autumpnum</i>), 8s |
| John Simpson, the same (<i>pro eodem</i>), 8s |
| Richard Sowes, the same, 7s 6d |
| Robert Burgeys, the same, 7s 6d |
| John Hayward, the same, 7s 6d |
| John Redgane, the same, 7s 8d |
| John Bosham, the same, 8s |
| John Brundle, the same, 7s 4d |
| Nicholas Speny, the same, 7s 8d |
| William Lymis, the same, 7s 6d |
| William Tellyeur, the same, 7s 6d |
| William Naffer, the same, 7s |
| John Cleye, the same, 7s |
| John Edward, the same, 8s |
| Edward Webyste, the same, 7s |
| Henry Sprygy, the same, 7s |

Note: The contract worker who was not a reaper (*metens*) is excluded.

Source: TNA. SC 6/939/2

The flexible arrangements highlight the puzzling steadiness in casual wage rates. Indeed, by counting in the price data one may generate fluctuations in real wage rates, but the steady money wage rate still provides an unusual pattern in comparison with the flexibility observed in the *famulus*'s stipend, and in seasonal contracts as above. When negotiable terms were common in other job markets, such steadiness implies possible institutional forces involved in wage determination. Another limitation that has been mentioned several times in relation to casual wage evidence is the lack of the number of piece-works done by a labourer. 'Income' is pretty much out of the scope

of this source material. Only in a few cases, as illustrated above as at Pittington, were seasonal incomes available, though it is still doubtful whether the labourers sought jobs elsewhere. However, since the casual wage rate was consistently higher than the daily average of contract wages as demonstrated above and in the previous chapter, the casual job market was an attraction to contract labourers. When job opportunities were abundant, job prospects in the casual sector might become an advantage for the labourer in the negotiation of work between the *famuli* and the employer.

6.4 Conclusion

Conclusions from Charts 6.10, 6.11, and 6.12 suggest that the agricultural job market in the first half of the fifteenth century was in favour of labourers, because the level of stipend increased, the purchasing power of the salary rose, and because the employer was not able to take advantage of the low price of grain but had to bear the brunt of fierce competition. The slight reduction in cash values of the salary package may seem puzzling at the first glance; but in consideration of the long-term trend in the price level of grain and the level of stipends that remained low until the late fourteenth century, the slight reduction is an end phase of the long-term downward trend in the value of the *famulus*'s salary package. Only in this period the considerable increase in stipends was able to arrest the trend.

Regarding demographic changes, the rising trend in stipends provides another possible indicator of labour supply on top of the two existing ones: the casual wage rate and the price level. During depopulation the price level of grains should fall because buyers became fewer in number; and during labour shortage the wage rate should rise because workers became fewer in number. However, this simple logic does not work properly, because the former promptly fell in the late middle ages whilst the later was relatively steady. It is hard to determine which one of the two is more accurately representing the economy, because there were commercial and monetary factors involved and should reduce the price level without demographic changes. With the rising trend in the *famulus*'s stipend, a solution is possible. The level of stipends rose and reached the summit in the mid-century, like the trend in the price level of grain. These two trends fit the fifteenth-century economy better than the trend in casual wage rates. On this basis, we may conclude that stipends were possibly more sensitive to economic events than casual labour wages.

Moreover, Chart 6.13 illustrates that there were structural differences between the two types of labour market; and that the differences made the hire of the *famuli* less vulnerable to monetary events. Monetarist historians have argued that the bullion shortage in the late middle ages caused deflation when suppressing the price level of commodities that included labour-power. The theory is correct in consideration of the

steady casual wage rate; but it is contradicted by the rising wage level of the stipend of the *famuli*. Money supply is a neutral factor. If the bullion shortage was able to restrain the labour market of casual labour, it should have the same influence on the other, especially since the cost of the *famuli* was higher than the cost of casual labourers on the demesne. The rising wage rate of the *famuli* implies that there was an invisible, stronger force operating behind.

Thirdly, the divergence provides evidence of defiance of wage regulations in the seigniorial sector. In contradiction to the 1388 regulation, on the Longbridge Deverill manorial demesne that belonged to Glastonbury Abbey, both the ploughman and the oxherd were paid 13s 4d each in 1420/1.⁵⁷⁹ At Acton, in 1409/10, the bailiff was paid 20s with a bonus of 6s 8d 'for his good service' (*pro bono servicio suo*). The two carters were paid 18s each with the clothes worth 3s 4d each. The six ploughmen were paid 10s each and one was paid 12s. And all except the bailiff were given grain liveries.⁵⁸⁰ These are infringement of parliamentary laws. Even on the demesne that had paid lower salary, like Ebbesbourne, the upper limits of the wage were ignored no later than 1433, when the plough-driver was paid 8s and the oxherd was paid 10s.⁵⁸¹ As a mere speculation, if the feudal power were strong enough to restrain the casual wage rate, it should be strong enough to restrain the greater burden of the salary of the

⁵⁷⁹ SHC, T\PH\lon/2/6/9828.

⁵⁸⁰ TNA, SC 6/989/13.

⁵⁸¹ HRO, 11M59/B1/177.

famuli. This suggests that job negotiation could possibly defy the institutional force.

As for the institutional forces on the casual wage rate, the steadiness of casual wage rates might reflect the concern of the employers in general. It is likely that seigniorial and non-seigniorial cultivators employed workers at the same rates. The 1368 petition was presented by those ‘who do not have lordships or villeins to serve them’.⁵⁸² Local gentry were apparently not the only group of people who were concerned about the wage rate. The village mechanisms for implementing regulations were set up in the manor court, where presentments were prepared by local jurors and village constables were the executive officials. In 1395, in Sloothby (Lincs.) Walter de Gernetoft, his wife Johanna, and John atte Hall, were ordered to give oath ‘in front of the constable and others of the community’ to serve in the village, but they refused and left for excessive wages.⁵⁸³ A covered mutual agreement over illegal wage rates might be carried on in the local community for a period. Thus when it was exposed, it involved several people. For example, in Keddington (Lincs.) and the neighbourhood, 6d for mowing an acre of grass was accepted by multiple employers in infringement of the law.⁵⁸⁴ And in Essex in 1389 the illegal rate ‘4d and food each day’ was so frequently presented in court that we cannot help but thinking it was becoming a local

⁵⁸² C. Given-Wilson (ed.), *The parliamentary rolls of medieval England 1275-1504*, v (Woodbridge, 2005), pp. 211-2.

⁵⁸³ ‘*cum constabulariis de slotheby et cum aliis de communitatibus eiusdem ville*’, *ibid.*, p. 237.

⁵⁸⁴ E. G. Kimball (ed.), *Records of some sessions of the peace in Lincolnshire 1381-1396*, v. 2 *the parts of Lindsey*, *The Lincoln Record Society* (1962), p. 112.

standard.⁵⁸⁵ Eventually, in 1406 at Great Horwood (Bucks.), ‘4d and food each day’ was recognised by the village by-law, albeit illegal by the parliamentary legislation.⁵⁸⁶ More evidence is required to explain why the casual wage rate was so inflexible. But it appears that the stubborn wage rate had its root in the village community.⁵⁸⁷

⁵⁸⁵ Ritchie, ‘Labour conditions in Essex’, pp. 431-432, 444.

⁵⁸⁶ Ault, *Open-field husbandry*, p. 55, 72, 80, 95.

⁵⁸⁷ C. Dyer, *Standards of living in the later middle ages: social change in England c. 1200 – 1520* (Cambridge, 1989), pp. 218-219.

Chapter 7 Conclusion

The conclusion of my research on fifteenth century English agricultural labour is in line with the existing understanding that this century was a golden age of the English labourer. The existing knowledge has illustrated that in the fifteenth century labourers in agriculture had an easier life than their ancestors had done. By studying the trend in the salaries paid to *famuli*, this research contributes to this subject by demonstrating that the labourer's annual income also increased. The fifteenth-century agricultural labourers should have had different perspectives on employment other than subsistence.

In summary, labourers from various backgrounds had different capacities and benefited in this economy in different ways. Those who had substantial holdings already had a decent livelihood. Their perspective on employment should be to maintain the living standard. Those who were less wealthy had holdings to provide food, but they needed supplementary income for buying other essentials. Smallholders and the landless had to work for subsistence. But in this century they were likely to have surplus. A stable livelihood for them was the riddance of starvation and possibly a chance of taking on holdings.

A wealthy villager might have a relatively comfortable life, but he was involved in the job market like his neighbours. On a yardland that contained 30 acres of arable

land in three-course rotation, ploughing 20 acres three times demanded roughly 60 man-days; fallow-ploughing, if performed, took 20-30 days. Reaping could be done within a week; stacking took another week. The virgater worked for a couple more months in haymaking, threshing, and maintenance. This gave him enough time to hire out his farming tools and the labour of using them.⁵⁸⁸ Some wealthy villagers served as the manager on the manorial demesne and were paid handsome salaries.⁵⁸⁹ The bailiff on the Lullington manorial demesne, East Essex, received 26s 8d and 5qrs 6bu of wheat in 1451/2, when an ordinary *famulus* received 8s and a delivery of barley.⁵⁹⁰ The work on his own holding might be coped with by the demesne's ploughmen; or his salary was sufficient to hire a full-time servant to work on his behalf.

The desire to maximise income might be the incentive for a wealthy villager to work for others, but there were two practical difficulties a wealthier peasant had to tackle – the falling price of grain and the rising wage rate. A virgater, supposedly having 30 acres, living in c. 1300 could make 32s (two-course rotation) and 46s (three-course rotation) selling excess grain produce. The same person if living in the 1440s would find that by selling off grain surplus he had only 22s 8d or 31s 8d.⁵⁹¹ If

⁵⁸⁸ R. H. Hilton, *The English peasantry in the later middle ages* (Oxford, 1975), p. 51; B. A. Hanawalt, *The ties that bound: peasant families in medieval England* (New York, 1986), p. 115.

⁵⁸⁹ D. L. Farmer, 'The *famuli* in the later middle ages', in R. Britnell and J. Hatcher (eds.), *Progress and problems in medieval England* (Cambridge, 1996), pp. 225-226.

⁵⁹⁰ The National Archives (hereafter TNA), SC 6/1027/4.

⁵⁹¹ The estimates of the income of a virgater in c. 1300 are borrowed from Dyer's work. My estimation of the income in the 1440s uses Dyer's estimates of the amount of grains produced on a virgater's holding and the price data composed by Farmer. The prices of grain are calculated using the averages of the prices from 1440 to 1449. The price data of peas are not available in Farmer's work. Thus I use Dyer's data from 1299. This adjustment should not have visible influence on the estimates, because the amount of peas is small. See, C. Dyer, *Standards of*

hiring, he would have to face an increase of 100% in cash payments given to the servant or 50% in the wage rates paid to casual labourers. This difficulty might be partly eased by the 25% cheaper rent or by the high price level of pastoral products, but employment remained a practical method to make up the loss.

The less wealthy, e.g. a half-virgater, lived on the verge of poverty. The holding he had provided little more than subsistence for a small family in normal years and was almost surely insufficient when hit by bad harvests.⁵⁹² He needed other sources of income to cover essential needs for cash. A half-virgater probably spent a half as much time as a virgater did on his own holding. Therefore, he could take on many casual jobs with little limitation. As far as evidence is available, frequently, this kind of labourer is found in the lord's payrolls, serving as lesser officials or *famuli*. Richard Felippes, for example, a half-virgater, worked as a part-time plough-driver (*fugator*) at Monkton Deverill. That post earned him 5s and 3qrs 2bu of barley by the year, on top of the produce on his half-virgate.⁵⁹³ That was an income of about 15s. A shepherd living in Clapham, East Sussex, was hired by the manorial demesne at Lullington to pasture the lord's flock with his own. He was paid 10s and full grain delivery. He was likely to consume the grain since he did not produce it and to keep 10s on top of the

living in the later middle ages: social change in England c. 1200 – 1520 (Cambridge, 1989), pp. 110-115; D. L. Farmer, 'Prices and wages, 1350-1500', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), p. 504.

⁵⁹² Dyer, *Standards of living*, p. 117.

⁵⁹³ Somerset Heritage Centre (hereafter SHC), T\PH\lon/2/10/9880; Farmer, 'The *famuli*', pp. 208, 227-229.

income from his flock.⁵⁹⁴ The salaries did not guarantee them a comfortable life when rent and the cost of essentials were considered, but their life was then safely above the subsistence level.

Those who had little or no means included cottars, young sons and daughters of villagers. They completely lived on hire. Their perspectives depended on the potential earnings from the job. A comparison between the possible income of a casual labourer and of a *famulus* will give a hint as to what they might expect from the job market. An ordinary *famulus* on the Pittington manorial demesne, Durham, received 15s and 4qrs 2.5bu of wheat that was worth about 23s in 1393/4. He could have 38s in cash if he sold the grain.⁵⁹⁵ In 1449/50, another *famulus* received 20s and the same quantity and quality of grain also worth 23s, which is 43s altogether.⁵⁹⁶ According to D. L. Farmer's prices of 'basket of consumables', in the 1390s the cost of living was about 33.57s and in the 1440s it was only 26.44s.⁵⁹⁷ The *famulus*, if single, could have a decent life working in the mid-century at Pittington. Elsewhere in England, the income could be smaller, but well above the subsistence level for a single person. As to the casual labourer, it is possible that he earned the same level of income as the *famulus* fairly easily. At Ormesby St Margaret, Norfolk, for example, John Deye

⁵⁹⁴ TNA, SC 6/1026/17.

⁵⁹⁵ The price of wheat was 5s 4d per quarter. See Dean and Chapter of Durham Muniments, Pittington Account Rolls (hereafter DCDM, PAR), 1393/4.

⁵⁹⁶ DCDM, PAR 1449/50.

⁵⁹⁷ Farmer, 'Prices and wages, 1350-1500', pp. 521-523.

mowed 24 acres of barley receiving 16s and he reaped for another 6 days paid 22*d* in August in 1435.⁵⁹⁸ With his scythe and mowing skill, he could mow in haymaking as well. The same person might be hired in threshing, which demanded capable workers to use flails. Some Pittington threshers managed to make over 20s across the winter like John Carter and Robert Bell.⁵⁹⁹ Keeping on with employment in the spring and the early summer the labourer could possibly make as much as a building worker did, like Simon Phelyp at Kirby Muxloe, Leicestershire, who earned £3 5¾*d* working for 218 days.⁶⁰⁰ In theory, casual employment provided the labourer a better outcome than did a yearly contract.

In reality, the seasonal variation in demand for labour implies that only a small proportion of casual labourers were able to secure consecutive employment in the year. In the summer of 1406, for instance, 405 man-days were hired to harvest crops on the Pittington demesne. On the basis that the work was done within ten days, 40 persons should be deployed on the field each day. One month before, a single John Carter was hired and mowed for 15 days in haymaking. In the previous winter, he was solely hired to thresh 116qrs of various grains.⁶⁰¹ The contrast between the compositions of the workforce suggests that there was a small demand outside the harvest season and that many harvesters could not survive the slack seasons if living

⁵⁹⁸ TNA, SC 6/939/10.

⁵⁹⁹ DCDM, PAR 1405/6, 1406/7, 1407/8, 1408/9, 1409/10.

⁶⁰⁰ Dyer, *Standards of living*, p. 227.

⁶⁰¹ DCDM, PAR 1405/6.

upon casual hire in agriculture. In this case, John Carter earned 41s in the two operations; and he should certainly be involved in the harvest somewhere. His income was above the price of the basket of consumables, 29.58s, given by Farmer.⁶⁰² If working harder or having a wife to earn extra income, he was able to maintain a family. Because the demand for labour was low in the slack seasons, labourers like Carter could not be many in number, or the average income would fall. Eventually, he or his competitors would have to leave the village for jobs in the slack seasons or to take on long-term contracts, as only the ones, who were most skilled or who had best connection with local employers stayed.

Carter's pattern provides the basis for speculating on the *famulus's* perspectives on the long-term contract. In the aftermath of the Black Death depopulation incurred fierce competition among employers and forced the wage rate to increase during our period. Employers would travel a long way to find a *famulus*. A Henry Maddy, for example, went to persuade John Walker's servant in Stainsby, Lincolnshire, to serve 33 miles away in Atterby with an 'excessive salary'.⁶⁰³ Moreover, abundant well-paid opportunities available in the casual sector were an incentive for the freeman labourers to turn down long-term contracts, forcing the employers to raise the offer.⁶⁰⁴

⁶⁰² Farmer, 'Prices and wages, 1350-1500', p. 521.

⁶⁰³ E. G. Kimball (ed.), *Records of some sessions of the peace in Lincolnshire 1381-1396*, v. 2 *the parts of Lindsey*, *The Lincoln Record Society* (1962), p. 150.

⁶⁰⁴ C. Dyer, *Lords and peasants in a changing society* (Cambridge, 1980), pp. 142-143; C. Dyer, and S. A. C. Penn, 'Wages and earnings in late medieval England: evidence from the enforcement of the Labour Laws', *Economic History Review*, 2nd ser., 43 (1990), pp. 366-372; J. Hatcher, 'England in the aftermath of the Black

Even so, the rising level of salary in this sector should not outpace the income gained by Carter's type of casual labourer. As stated, in order to live on casual hire a labourer had to be able to secure employment in the slack seasons; but in the slack seasons the employer had the upper hand and only the most skilled who threshed or mowed clean and swift was frequently hired. Those disadvantaged could only get limited income due to the difficulty of finding lengthy employment. Therefore, when the salary of the *famuli* was rising to be on a par to the potential, and limited, income they could expect in the casual sector, working as the *famuli* became an economic choice.

The advantage possessed by a skilled labourer over a less skilled one in getting employment in the slack seasons implies of a pattern of life-cycle employment. Who were the less skilled? Generally speaking, all farming skills were relating to physical strength. A male labourer in his early 20s was considerably stronger than a labourer in the late teens.⁶⁰⁵ Because the youthful labourers could not compete with adults in terms of physical strength, the disadvantaged position of the *famulus* was the best deal they could get. And in agriculture people entered into the job market young, so as to reduce their parents' burden. Although there is a lack of medieval evidence of the life-cycle *famulus*, this pattern is a reasonable explanation of how youthful labourers kept on in employment with few skills. If this was the case, servanthood provided

Death', *Past & Present*, 144 (1994), p. 28.

⁶⁰⁵ J. Burnette, 'How skilled were English agricultural labourers in the early nineteenth century?', *Economic History Review*, 59 (2006), pp. 704-705.

youthful labourers, and other less skilled labourers, a stable, albeit poor, livelihood. By serving for several years their physical strength grew and enabled them to secure employment in the casual sector. In fact, the said John Carter, before working as a casual labourer, had worked as a *famulus* on the Pittington demesne from c. 1392 to c. 1400.⁶⁰⁶ And by serving for several years they might have savings, which could accumulate to a few pounds, sufficient for taking on a holding. In Badbury, Wiltshire in 1357, John Gibbes, an ex-*famulus* of John atte Steorte, sued his former master for withheld salaries and won the case. The amount of money involved is untold, but it must have been considerable, because in the following court Gibbes managed to pay an entry fine of £10 and became a yardlander.⁶⁰⁷

Labourers from different backgrounds benefited in this economy in different ways. It appears that the village lower strata earned more from employment than their wealthy neighbours did, because they were not limited by the work on their own holdings. On the other hand, a substantial holding was desirable because it guaranteed a stable livelihood. A labourer like John Carter might fare well for some years; but he would not do the same when he grew old. This may explain why he disappeared from sight after 1406. Probably his good income allowed him to take on a decent tenancy, though there is no indication in the source material. Similarly there is no evidence of

⁶⁰⁶ The series is discontinued in 1391/2 and 1400-1405. Therefore it is unknown if John Carter started serving in 1391 and if he was still there after 1400. DCDM, PAR 1392/3-1399/1400.

⁶⁰⁷ M. Müller, 'A divided class? Peasants and peasant communities in later medieval England', *Past & Present Supplement* 2 (2007), p. 130.

how many landless labourers ascended in the village social order by taking advantage of the job market. Instead, there is evidence that some labourers would rather squander their decent earnings on leisure than save them for a future use.⁶⁰⁸ Nevertheless, for hardworking people, the high wage rate and low price level in this century provided an excellent chance for them to acquire a stable livelihood. This may explain why in many places the proportion of peasants that had half-virgate or more increased in late medieval England.

In conclusion, a common complaint about quantitative studies is the omission of the 'quality' of the figures. In the study of medieval wage labour, this criticism can easily find validity because of the tendency to accept wage data as granted economic indicators without explaining the condition of the labour market. In conducting this research I had to carry on with the same quantitative material but approach it from different aspects of the source material. This research has illustrated how much demand was generated in what season, how much was done by a certain type of labourer in comparison with the other, and how significant casual labourers might be. However, it has barely explained how the worker improved his livelihood by taking on employment, where the worker made his livelihood in the slack seasons, and how some workers were able to secure consecutive casual employment to make it a good

⁶⁰⁸ Dyer, *Standards of living*, pp. 224-225.

source of income. Farmer has remarked that 'No hungry man is appeased by learning that his decennial average wage is 50 per cent higher than his grandfather's'.⁶⁰⁹ This comment embarrasses us who have to rely on a single type of source material to reconstruct a complicated community.

Secondly, the relationship between the employer and the employee is a critical factor in the employment. Not only might happy villagers help the lord in the harvest, but also the lord was willing to employ and pay them. A socio-economic implication emerges in the employment of customary labourers. Why could some lords maintain a large number of labour services and why did some others have to rely on casual labourers? In existing studies, we are told of the conflictive relationship between the employer and the employee. This subject could be a purely political topic focusing on how both parties accumulated opposing energy. However, in the study of the economy that is involved in this relationship, the affection or enmity between the seigniorial employer and the employee becomes a fundamental issue. This research, relying upon figures, has shed but a dim light on this issue.

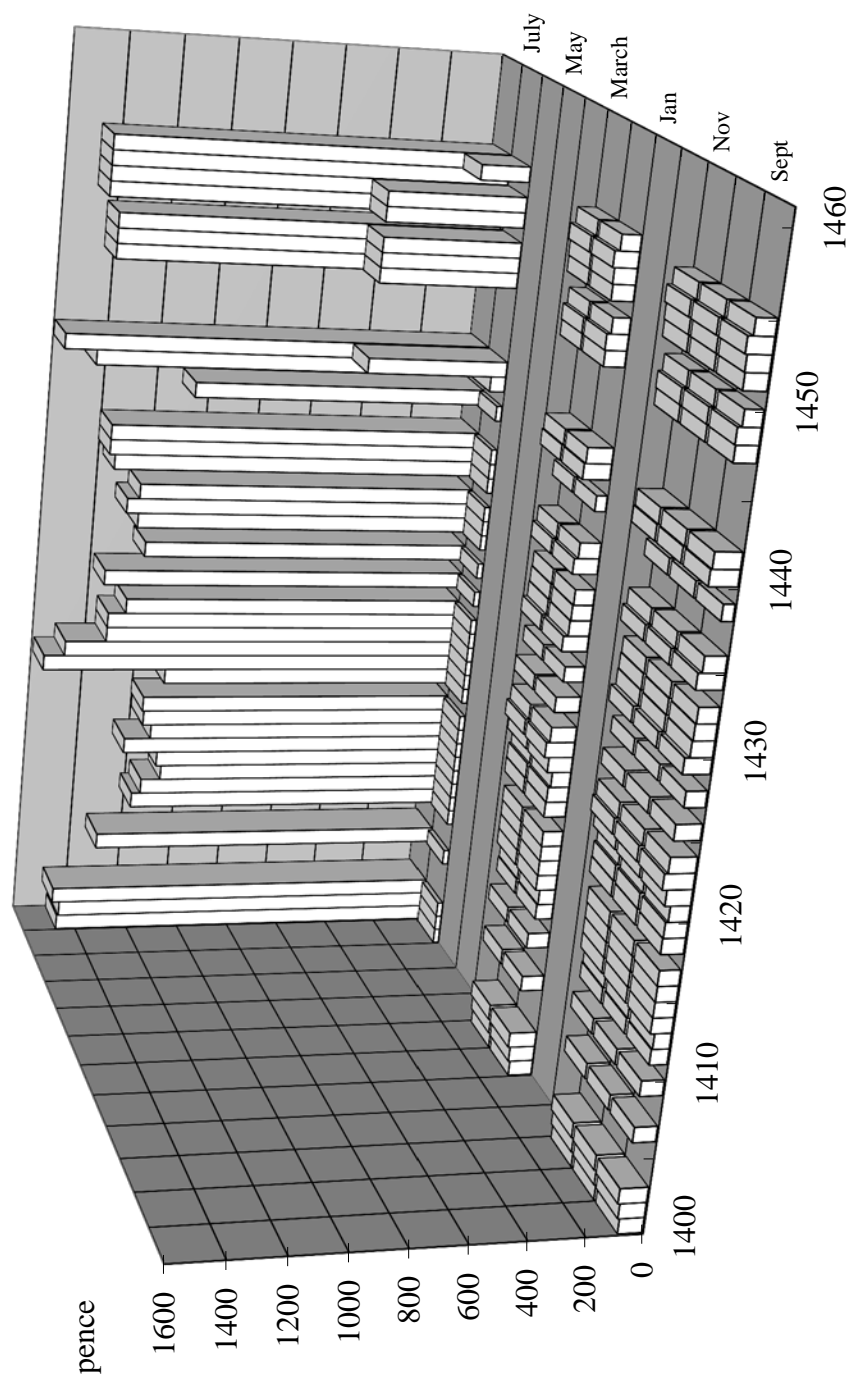
As for the employment of the *famuli*, the reconstruction of their economic activities has supported my criticism of casual wage evidence. This result is hardly comforting. A more important aspect of the post, or of its early modern counterpart, *i.e.* the farm servant, is the personal activity. Like many early modern farm servants,

⁶⁰⁹ Farmer, 'Prices and wages, 1350-1500', p. 494.

the personal connection with the demesne was important for the person to find good casual employment in agriculture. On the Pittington demesne, this life-cycle pattern is recognised when John Carter, Robert Bell, Thomas Bronn, *etc*, returned to the demesne and took on well-paid casual tasks after their service on the demesne. The manorial account roll, however, provides limited information of this sort. This source material is not even suitable for reconstructing the resemblance between the *famuli* and the early modern farm servant.

It has been commented that the casual wage evidence can be misleading in indicating changes during short periods. The context in which the casual wage was employed explains the reasons. The casual labour supply in an agricultural community is highly flexible. Men were the main labour force; but when necessary or allowed, women and children joined the labour market. In this sense only the busiest operation like the harvest could stress the labour market; and only the fiercest economic events could trigger changes. The other reason is the misreading of the nature of employing casual labourers. Few rural dwellers could actually live upon casual hire. For doing so, the labourers had to secure long-term hire, like ploughing for widows or the elderly. Otherwise, Chart 7.1 represents casual opportunities that ordinary villagers could take on. It is unlikely that villagers could easily find a casual employment outside August. The casual hire was a part of the rural life, but it was

Chart 7.1 The monthly costs of labour in the main farming operations on the Ebbesbourne manorial demesne, Wiltshire, 1440-1454



Note: The farming operations are weeding/mowing, threshing, and the harvest.
Source: HRO, 11M59/B1/150-191.

hardly a livelihood. This uneven labour market is the basis for interpreting casual labour evidence.

Moreover, employment was the concern of the village authorities. The community had its political power enacted by local élites who were potentially agricultural employers. It seems that peasant employers were not hesitant 'to control servants and laborers'.⁶¹⁰ R. H. Hilton has asked whether villagers were helping each other or exploiting their neighbours' needs.⁶¹¹ Accordingly, the village authority took part in enforcing proper farming on the open-field. It forced smaller-holders to combine their ploughs and beasts to make workable plough-teams. Such co-operation was executed seriously so the land would not be left untilled. Two fourteenth-century cases from Durham and Warwickshire illustrate that soil derogation from weeds on the cropping field was of great concern to the villagers. And W. O. Ault has elaborated how able-bodied people were deterred from gleaning and how capable workers were restricted from leaving the village.⁶¹² An implication given by the divergent movement in wage rates is that the casual wage rate was possibly regulated by the village community itself, because villagers were usually employers of casual labourers. The lack of evidence disallows a detailed research of this subject at this

⁶¹⁰ E. Clark, 'Medieval labor law and English local courts', *The American Journal of Legal History*, 27 (1983), p. 333.

⁶¹¹ Hilton, *The English peasantry*, p. 51.

⁶¹² W. O. Ault, *Open-field farming in medieval England: a study of village by-laws* (London, 1972), 20-21, 24, 27-34.

point, but the frequent report of the village authority's performance of power inspires me to contemplate this possibility. It is probable that, apart from the economic force, the governmental force, and the natural restrictions, there is a community sense, which was able to fend off feudal coercion and to regulate daily farming activities, in the labour market, but it is not included in the account rolls.

Lastly, regarding labour management, the *famuli* were potentially an economic factor for the manorial demesne to embark on early capitalism. The research has examined the pattern of employing the *famuli* and has tried to explain the economic rationale. They were permanent workers commonly found on large, business farms. They were likely employed in the capitalist way by negotiation. Demesne managers needed this type of labourer to save the cost of labour in continuous tasks. Apart from the continuous responsibilities, it has to be emphasised that because casual tasks were paid by the piece-work or by the daily-work at fixed wage rates, the only way to reduce the cost of casual labourers without reducing the size of the farm and without imposing labour service was to transfer the work to the salaried *famuli*. The research has illustrated that by properly managing the *famuli*, they could save the manorial demesne a considerable amount of money in seasonal operations, like at Alciston and Lullington. And the Pittington case has given us an example of how much cost could be reduced by transferring work from casual labourers to the *famuli*. It appears, at this

point that the employment of the *famuli* could be an economic, rational decision. But the source material allows little more than speculation of how the Alciston pattern was established and how the change at Pittington happened. A specific subject dedicated to closely examining the management of the *famuli* may be able to explain how Britain advanced into agricultural capitalism.

Appendix 1 Labour cost in three major seasonal operations

| | Threshing labour cost | Weeding and mowing labour cost | Harvest labour cost |
|---|-----------------------|--------------------------------|---------------------|
| Berkshire | | | |
| Brightwell ^W 1409/10 | 49s 3d | 3s 4d | 72s 6d |
| Harwell ^W 1409/10 | 19s 1d | 10s | 41s 6d |
| Woolstone 1416/7 | 31s 3d | 48s 7d | 77s 6d |
| Buckinghamshire | | | |
| Ivinghoe ^W 1409/10 | 53s 5d | 4s | n/a |
| Devonshire | | | |
| Hurdwick ^T 1463/4 | 57s 3¼d | 11s | 142s 2d |
| Werrington ^T 1453/4 | 31s 3¼d | 16s | 19s |
| Durham | | | |
| Elvethall ^D 1447/8 | 228d | 59d | 1388d |
| Pittington ^D 1450/1 | 0 | - | 58s |
| Hampshire | | | |
| Crawley ^W 1409/10 | 24s 1d | 6s 8d | 120s 8¾d |
| Ecchinswell ^W 1409/10 | 35s 1¾d | 4s 6d | 16s 2d |
| Marwell ^W 1409/10 | 0 ¹ | 18s 6d | 69s 5d |
| Meon ^W 1409/10 | 96s 4¾d | n/a | 100s 14d |
| Overton ^W 1409/10 | 34s 7½d | 16s 6d | 100s ¼d |
| Twyford ^W 1409/10 | 48s ½d | 23s | 169s 5¾d |
| Merdon ^W 1409/10 | 0 | 32s | 50s 8d |
| Norfolk shire | | | |
| Flegg ^N 1421/2 | 35s 9½d | 2s 6d | 69s |
| Martham ^N 1419/20 | 75s 6d | 7s 3d | 161s 2d |
| Ormesby St Margaret's 1451/2 | 57s 9½d | 14s 9d | 71s 3½d |
| Plumstead ^N 1418/9 | 66s 9¾d | 8s 4d | 185s 4d |
| Taverham ^N 1416/7 | 21s 5d | 7s | 57s 11½d |
| Northampton shire | | | |
| Catesby 1448/9 | 14s 11½d | 3s 8d | 53s 5½d |
| Shropshire | | | |
| Legh 1497/8 | 44s 8½d | 6s | 41s 1d |
| Suffolk | | | |
| Acton 1409/10 | 129s 5d | 39s 1d | 253s 3d |
| Sussex | | | |
| Alciston ^B 1450/1 | n/a | 48s 3d | 10s 11d |
| Apuldram ^B 1449/50 | 50s 8d | 3s 4d | 70s 2d |
| Lullington ^B 1450/1 | n/a | 19s 7d | 15s |
| Wiltshire | | | |
| Bromham ^B 1435/6 | 14s 5½d | 0 | 6s 7d |
| Downton ^W 1429/30 | 39s 11½d | 12d | 12s |
| Ebbesbourne ^W 1449/50 | 28s 11¾d | 42s 4d | 119s 8d |
| Longbridge Deverill ^G 1451/2 | 16s 3¾d | | 90s 7d |
| Monkton Deverill ^G 1452/3 | 11s 1½d | 3s | 18s 8d |
| Worcestershire | | | |
| Hewell | n/a | 9s | 100s |

Note: B: Battle Abbey estate; D: Durham Priory estate; G: Glastonbury Abbey estate; N: Norwich Priory estate; T: Tavistock Abbey estate; W: Winchester estate.

1. Bought from the farmer.

Sources: DCDM, Elvethall 1447/8; Pittington 1450/1; DRO, D52/1 Hurdwick 1463/4; Werrington 1453/4; Legh 1497/8; ESRO, SAS/G44/103; SHC, T\PH\lon/2/11/9813, T\PH\lon/2/6/9836; TNA, SC 6/758/4, SC 6/940/10, SC 6/946/24, SC 6/989/13, SC 6/1018/24, SC 6/1027/3, SC 6/1047/13, SC 6/1068/11; NRO, DN EST 9/15; NRS 20D2 5914; DCN 60/29/45; DCN 60/35/46; HRO, 11M59/B1/156, 173, 187.

Appendix 2 The value of the salary package on the Pittington manorial demesne,
Durham, 1390-1460

| | The price of grain | Stipends | Grain delivery and the cash value | | The cash value of the salary package |
|------|-----------------------|--------------|-----------------------------------|-----------|---|
| | wheat (s/qt) | averages (s) | 1qt/12w (4qt 2.5bu) | value (s) | (s) |
| 1390 | | 14.57 | | | |
| 1391 | | | | | |
| 1392 | 3 | 15.29 | 4.3125 | 12.9375 | 28.2275 |
| 1393 | 5.33 | 16.61 | 4.3125 | 22.985625 | 39.595625 |
| 1394 | 5.26 | 15 | 4.3125 | 22.68375 | 37.68375 |
| 1395 | 5.5 | 15.83 | 4.3125 | 23.71875 | 39.54875 |
| 1396 | | 16.08 | | | |
| 1397 | 6.36 | 15.92 | 4.3125 | 27.4275 | 43.3475 |
| 1398 | | 16 | | | |
| 1399 | | 16 | | | |
| 1400 | | | | | |
| 1401 | | | | | |
| 1402 | | | | | |
| 1403 | | | | | |
| 1404 | | | | | |
| 1405 | | 15.67 | | | |
| 1406 | | 16.4 | | | |
| 1407 | 3.33 | 16 | 4.3125 | 14.360625 | 30.360625 |
| 1408 | | 16.6 | | | |
| 1409 | 16 | 16.88 | 4.3125 | 69 | 85.88 |
| 1410 | | | | | |
| 1411 | | | | | |
| 1412 | 6 | 17.22 | 4.3125 | 25.875 | 43.095 |
| 1413 | 5 | 18.5 | 4.3125 | 21.5625 | 40.0625 |
| 1414 | | | | | |
| 1415 | | | | | |
| 1416 | | | | | |
| 1417 | | | | | |
| 1418 | | 18 | | | |
| 1419 | 8 | 18.2 | 4.3125 | 34.5 | 52.7 |
| 1420 | | 17.6 | | | |
| 1421 | | | | | |
| 1422 | | 18.5 | | | |
| 1423 | | 19 | | | |

| | | | | | |
|------|------|-------|--------|-----------|-----------|
| 1424 | | 18.6 | | | |
| 1425 | | | | | |
| 1426 | | | | | |
| 1427 | | 17.75 | | | |
| 1428 | | 17.75 | | | |
| 1429 | | 17.6 | | | |
| 1430 | | | | | |
| 1431 | | | | | |
| 1432 | | | | | |
| 1433 | | 17.6 | | | |
| 1434 | | | | | |
| 1435 | | | | | |
| 1436 | | | | | |
| 1437 | | | | | |
| 1438 | | | | | |
| 1439 | | | | | |
| 1440 | | | | | |
| 1441 | | | | | |
| 1442 | | | | | |
| 1443 | | | | | |
| 1444 | | | | | |
| 1445 | | | | | |
| 1446 | 5.33 | 20 | 4.3125 | 22.985625 | 42.985625 |
| 1447 | | | | | |
| 1448 | | | | | |
| 1449 | 5.33 | 20 | 4.3125 | 22.985625 | 42.985625 |
| 1450 | 6 | 20 | 4.3125 | 25.875 | 45.875 |
| 1451 | 6 | 18 | 4.3125 | 25.875 | 43.875 |
| 1452 | | | | | |
| 1453 | | | | | |
| 1454 | | | | | |
| 1455 | | | | | |
| 1456 | | | | | |
| 1457 | | | | | |
| 1458 | | | | | |
| 1459 | | | | | |
| 1460 | | | | | |

Source: DCDM, PAR 1390-1451.

Appendix 3 The value of the salary package on the Lullington manorial demesne, East Sussex, 1410-1430

| | The price of grain | Stipends | Board money | Grain delivery and the cash value | | The cash value of the salary package |
|------|--------------------|--------------|-------------|-----------------------------------|-----------|--------------------------------------|
| | Barley (s) | Averages (s) | 7d/w | 1bu/w for 28w | Value (s) | (s) |
| 1410 | 4 | 5.67 | 14 | 3.5 | 14 | 33.67 |
| 1411 | 3.33 | 5.33 | 14 | 3.5 | 11.655 | 30.985 |
| 1412 | 3.33 | 5.64 | 14 | 3.5 | 11.655 | 31.295 |
| 1413 | 3.33 | 5.64 | 14 | 3.5 | 11.655 | 31.295 |
| 1414 | 4 | 5.64 | 14 | 3.5 | 14 | 33.64 |
| 1415 | 6 | 5.64 | 14 | 3.5 | 21 | 40.64 |
| 1416 | 6 | 5.5 | 14 | 3.5 | 21 | 40.5 |
| 1417 | 5 | 5.5 | 14 | 3.5 | 17.5 | 37 |
| 1418 | | | | | | |
| 1419 | | | | | | |
| 1420 | 5 | 7.6 | 14 | 3.5 | 17.5 | 39.1 |
| 1421 | 5 | 7.56 | 14 | 3.5 | 17.5 | 39.06 |
| 1422 | 4 | 7.56 | 14 | 3.5 | 14 | 35.56 |
| 1423 | 4 | 7.56 | 14 | 3.5 | 14 | 35.56 |
| 1424 | | | | | | |
| 1425 | 3.33 | 7.56 | 14 | 3.5 | 11.655 | 33.215 |
| 1426 | | | | | | |
| 1427 | | | | | | |
| 1428 | 3.67 | 7.78 | 14 | 3.5 | 12.845 | 34.625 |
| 1429 | 4 | 7.78 | 14 | 3.5 | 14 | 35.78 |
| 1430 | 3.33 | 7.78 | 14 | 3.5 | 11.655 | 33.435 |

TNA, SC 6/1025/19-26, -1026/2-13.

Bibliography

Original documents

- Acton minister's account rolls, The National Archive, SC 6/989/10-14
- Alciston minister's account rolls, East Sussex Record Office, SAS/G44/55-139.
- Apuldrum minister's account rolls, The National Archives, SC 6/1016/5-SC6/1019/21.
- Bridgewater Papers, Shropshire Archive, 212/81-212/82.
- Broadway minister's account rolls, The National Archives, SC 6/1065/6, 8, 9, 21, SC 6/1066/1, 3
- Bromham minister's account rolls, The National Archives, SC 6/1046/11-SC 6/1049/5.
- Catesby minister's account rolls, The National Archives, SC 6/946/16, 18, 24.
- Dean and Chapter of Durham Muniments, Pitlington Account Rolls 1405/6-1451/2.
- Dean and Chapter of Durham Muniments, Elvethall Account Rolls 1424/5-1528/9.
- Flegg minister's account rolls, Norfolk Record Office, DN/EST 9/12-9/20.
- Hewell minister's account rolls, The National Archives, SC 6/1068/11-19.
- Hurdwick minister's account rolls, Devon Record Office, D52/1 Hurdwick 1462/3-1497/8.
- Legh minister's account rolls, Devon Record Office, D52/1 Legh 1497.
- Longbridge Deverill minister's account rolls, Somerset Heritage Centre, T\PH\lon/2/6/9815-6, 9818-21, 9823-6, 9829, 9830-3, 9835-41, 9869-70, 9872, 9874-7, 10613, 10615, 10708-9; T\PH\lon/2/7/9940-2, 9944-62, 9964.
- Longbridge Deverill Parsonage account rolls, Somerset Heritage Centre, T\PH\lon/2/8/9605-9617, 9636, 9843-9853, 9855-9861, 9864, 9868, 9884, 10611, 10614, 10664, 10706-7; T\PH\lon/2/9/9814, 9854, 9862-3, 9865.
- Lullington minister's account rolls, The National Archive, SC 6/1025/10-SC6/1027/16.
- Martham minister's account rolls, Norfolk Record Office, NRS 5905-5916.
- Monkton Deverill minister's account rolls, Somerset Heritage Centre, T\PH\lon/2/10/9692-9695, 9697-9705, 9720, 9822, 9873, 9880-1, 10625, 10721-2; T\PH\lon/2/11/9707-9719, 9793-9804, 9813, 9827, 9834, 9882-3, 9998-10000, 10626, 10717-10719, 10726.
- Ormesby with Scratby minister's account rolls, The National Archives, SC 6/938/25-SC 6/941/1.
- Plumstead minister's account rolls, Norfolk Record Office, DCN 60/29/40 – 60/29/46A.
- Taverham Minister's Account rolls, Norfolk Record Office, DCN 60/29/43, DCN 60/35/44-60/35/52.

Winchester Pipe Rolls, Hampshire Record Office, 11M59/B1/150 - 11M59/B1/191.
 Woolstone minister's account rolls, The National Archives, SC 6/757/12-SC 6/758/10
 Werrington minister's account rolls, Devon Record Office, D52/1 Werrington
 1412/3-1498/9.

Secondary literature

- Adkins, W. D., (ed.), *The Victoria history of the county of Northampton*, 2 (1906).
- Allen, R. C., 'The growth of labor productivity in early modern English agriculture', *Explorations in Economic History*, 25 (1988), pp. 117-146.
- Allen, R. C., and Weisdorf, J. L., 'Was there an 'industrious revolution' before the industrial revolution? An empirical exercise for England, c. 1300–1830', *Economic History Review*, 2nd ser., 64 (2011), pp. 715-729.
- Ault, W. O., *Open-field husbandry and the village community: a study of agrarian by-laws in medieval England* (Philadelphia, 1965).
- Ault, W. O., *Open-field farming in medieval England: a study of village by-laws* (London, 1972).
- Bailey, J., *General view of the agriculture of the County of Durham* (London, 1810).
- Bailey, M., *The English manor c. 1200 – c. 1500: selected sources translated and annotated by Mark Bailey* (Manchester, 2002).
- Bean, J. M. W., 'Plague, population and economic decline in England in the later middle ages', *Economic History Review*, 2nd ser., 15 (1963), pp. 423-437.
- Bean, J. M. W., 'Landlords', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 526-586.
- Bennett, H. S., *Life on the English manor: a study of peasant conditions, 1150-1400* (Cambridge, 1937).
- Beveridge, W., 'Wages in the Winchester manors', *Economic History Review*, 2nd ser., 7 (1936), pp. 22-43.
- Beveridge, W., 'Westminster wages in the manorial era', *Economic History Review*, 2nd ser., 8 (1955), pp. 18-35.
- Brandon, P. F., 'Demesne arable farming in coastal Sussex during the later middle ages', *Agricultural History Review*, 19 (1972), pp. 113-134.
- Brandon, P. F., 'Cereal yields on the Sussex estates of Battle Abbey during the later middle ages', *Economic History Review*, 2nd ser., 25 (1972), pp. 403-420.
- Bridbury, A. R., 'The Black Death', *Economic History Review*, 2nd ser., 26 (1973), pp. 577-592.
- Britnell, R. H., *The commercialisation of English society 1000-1500* (Manchester and New York, 1996).
- Britnell, R. H., 'Minor landlords in England and medieval agrarian capitalism', *Past*

- & *Present* 89 (1980), pp. 3-22.
- Britnell, R. H., 'Specialization of work in England, 1100-1300', *Economic History Review*, 2nd ser., 54 (2001), pp. 1-16.
- Burnette, J., 'How skilled were English agricultural labourers in the early nineteenth century?', *Economic History Review*, 2nd ser., 59 (2006), pp. 688-716.
- Campbell, B. M. S., *English seigniorial agriculture 1250-1450* (Cambridge, 2000).
- Campbell, B. M. S., 'A unique estate and a unique source: the Winchester Pipe Rolls in perspective', in R. H. Britnell, (ed.), *The Winchester Pipe Rolls and medieval English society* (Woodbridge, 2003), pp. 21-43.
- Campbell, B. M. S., 'Arable productivity in medieval England: some evidence from Norfolk', *Journal of Economic History*, 43 (1983), 379-404.
- Campbell, B. M. S., and Overton, M., 'A new perspective on medieval and early modern agriculture: six centuries of Norfolk farming c.1250-c.1850', *Past and Present*, 141 (1993), pp. 38-105.
- Campbell, B. M. S., Galloway, J. A., Keene, D., and Murphy, M., *A medieval capital and its grain supply: agrarian production and distribution in the London region c. 1300*, *Historical Geography Research Series 30* (London, 1993).
- Counce, S., 'Twentieth-century farm servants: the horselads of the East Riding of Yorkshire', *Agricultural History Review*, 39 (1991), pp. 143-166.
- Chayanov, A. V., Thorner, D., Kerblay, B., and Smith, R. E. F., (eds.), *A. V. Chayanov on the theory of peasant economy* (Wisconsin and Manchester, 1986).
- Clark, E., 'Medieval labor law and English local courts', *American Journal of Legal History*, 27 (1983), pp. 330-353.
- Clark, G., 'The long march of history: farm wages, population, and economic growth, England 1209-1869', *Economic History Review*, 2nd ser., 60 (2007), pp. 97-135.
- Clark, G., 'Productivity growth without technical change in European agriculture before 1850', *Journal of Economic History*, 47 (1987), pp. 419-432.
- Creighton, C., *A history of epidemics in Britain Vol I: from AD 664 to the Great Plague* (Cambridge, 1965, 2nd edn; 1891, 1st edn).
- Davenport, F. G., *The economic development of a Norfolk manor 1086-1565* (Cambridge, 1906).
- Davis, T., *General view of agriculture in Wiltshire* (1794).
- Devine, T. M. (ed.), *Farm servants and labour in Lowland Scotland, 1770-1914* (Edinburgh, 1984).
- Dobson, R. B. (ed.), *The Peasants' Revolt of 1381* (London, 1983).
- Dodds, B., 'Workers on the Pittington demesne in the late middle ages', *Archaeologia Aeliana: Miscellaneous Tracts relating to Antiquity*, 5th ser., 28 (2000), pp. 147-161.

- Dyer, C., and Penn, S. A. C., 'Wages and earnings in late medieval England: evidence from the enforcement of the Labour Laws', *Economic History Review*, 2nd ser., 43 (1990), pp. 356-376.
- Dyer, C., 'Changes in diet in the late middle ages: the case of harvest workers', *Agricultural History Review*, 36 (1988), pp. 21-37.
- Dyer, C., 'Deserted medieval villages in the West Midlands', *Economic History Review*, 2nd ser., 35 (1982), pp. 19-34.
- Dyer, C., 'Tenant farming and tenant farmers: the West Midlands', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 636-647.
- Dyer, C., *Standards of living in the later middle ages: social change in England c. 1200 – 1520* (Cambridge, 1989).
- Dyer, C., 'A small landowner in the fifteenth century', *Midland History*, 1 (1971-2), no. 3, pp. 1-14.
- Dyer, C., *Lords and peasants in a changing society* (Cambridge, 1980).
- Epstein, S. A., 'The theory and practice of the just wage', *Journal of Medieval History*, 17 (1991), pp. 53-69.
- Evans, G. E., *Ask the fellows who cut the hay* (London, 1956).
- Faith, R., 'Demesne resources and labour rent on the manors of St. Paul's Cathedral, 1066-1222', *Economic History Review*, 2nd ser., 47 (1994), pp. 657-678.
- Farmer, D. L., 'Prices and wages, 1042-1350', in H. E. Hallam (ed.), *The agrarian history of England and Wales*, vol. 2 (Cambridge, 1988), pp. 715-817.
- Farmer, D. L., 'Prices and wages, 1350-1500', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 431-525.
- Farmer, D. L., 'The *famuli* in the later middle ages', in R. Britnell and J. Hatcher (eds.), *Progress and problems in medieval England* (Cambridge, 1996), pp. 207-236.
- Farmer, D. L., 'Grain yields on the Winchester manors in the later middle ages', *Economic History Review*, 2nd ser., 30 (1977), pp. 555-566.
- Farmer, D. L., 'Crop yields, prices, and wages in medieval England', *Studies in Medieval and Renaissance History*, 6 (1983), pp. 117-155.
- Finberg, H. P. R., *Tavistock abbey: a study in the social and economic history of Devon* (Cambridge, 1951).
- Fitzherbert, A., and Skeat, W. W. (ed. and intro.), *The book of husbandry, reprinted from the version of 1534* (London, 1882).
- Fox, H. S. A., 'Farmworkers' accommodation in later medieval England: three case studies from Devon', in D. Hooke and D. Postles (eds.), *Names, time and place: essays in memory of Richard McKinley* (Oxford, 2003), pp. 129-164.

- Given-Wilson, C., 'Service, serfdom and English labour legislation, 1350-1500', in A. Curry and E. Matthew (eds.), *Concepts and patterns of service in the later middle ages* (Woodbridge, 2000), pp. 21-37.
- Given-Wilson, C., (ed.), *The parliamentary rolls of medieval England 1275-1504*, v (Woodbridge, 2005).
- Goldberg, P. J. P., 'What was a servant', in A. Curry and E. Mathew (eds.), *Concepts and patterns of service in the later middle ages* (Woodbridge, 2000), pp. 1-20.
- Goldberg, P. J. P., 'Migration, youth and gender in later medieval England', in P. J. P. Goldberg and F. Riddy (eds.), *Youth in the middle ages* (York, 2004), pp. 85-99.
- Gottfried, R. S., *Epidemic disease in fifteenth century England: the medical response and the demographic consequences* (Leicester, 1978).
- Gray, H. L., 'The commutation of villein services in England before the Black Death', *English Historical Review*, 29 (1914), pp. 625-656.
- Hanawalt, B. A., *The ties that bound: peasant families in medieval England* (New York, 1986).
- Hare, J. N., 'The demesne lessees of fifteenth-century Wiltshire', *Agricultural History Review*, 29 (1981), pp. 1-15.
- Hare, J. N., *Lords and tenants in Wiltshire, c. 1320 – c. 1520* (unpublished PhD dissertation, University of London, 1975).
- Hare, J. N., 'Regional prosperity in fifteenth-century England: some evidence from Wessex', in M. A. Hicks, (ed.), *Revolution and consumption in late medieval England* (Woodbridge, 2001), pp. 105-26.
- Harriss, G., *Shaping the nation: England 1360-1461* (Oxford, 2005).
- Harvey, B. F., *Westminster abbey and its estates in the middle ages* (Oxford, 1977).
- Harvey, B. F., 'The leasing of the abbot of Westminster's demesnes in the later middle ages', *Economic History Review*, 2nd ser., 22 (1969), pp. 17-27.
- Harvey, B. F., 'Introduction: the "crisis" of the early fourteenth century', in B. M. S. Campbell (ed.), *Before the Black Death: studies in the 'crisis' of the early fourteenth century* (Manchester and New York, 1991), pp. 1-24.
- Harvey, P. D. A., 'Tenant farming and farmers: the Home Countries', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 662-679.
- Harvey, P. D. A., *Manorial records, British Records Association, Archives and the User 5* (London, 1984).
- Hatcher, J., 'England in the aftermath of the Black Death', *Past & Present*, 144 (1994), pp. 3-35.
- Hatcher, J., 'Plague, population and the English economy', in M. Anderson (ed.), *British population history* (Cambridge, 1996), pp. 9-94.

- Hatcher, J., 'The great slump of the mid-fifteenth century', in R. H. Britnell and J. Hatcher (ed.), *Progress and problems in medieval England: essays in honour of Edward Miller* (Cambridge, 1996), pp. 237-272.
- Hatcher, J., 'English serfdom and villeinage: towards a reassessment', *Past & Present*, 90 (1981), pp. 3-39.
- Hatcher, J., *Plague, population and the English economy 1348-1530* (London, 1977).
- Hatcher, J., Piper, A. J., and Stone, D., 'Monastic mortality: Durham Priory, 1395–1529', *Economic History Review*, 59 (2006).
- Hilton, R. H., *The English peasantry in the later middle ages* (Oxford, 1975).
- Hilton, R. H., 'Agrarian class structure and economic development in pre-industrial Europe: a crisis of feudalism', *Past and Present*, 80 (1978), pp. 3-19.
- Homans, G. C., *English villagers of the thirteenth century* (Cambridge, Massachusetts, 1942).
- Howkins, A., 'Peasants, servants and labourers: the marginal workforce in British agriculture, c 1870-1914', *Agricultural History Review*, 42 (1994), pp. 49-62.
- Karakacili, E., 'English agrarian labor productivity rates before the Black Death: a case study', *Journal of Economic History*, 64 (2004), pp. 24-60.
- Kimball, E. G. (ed.), *Records of some sessions of the peace in Lincolnshire 1381-1396, v. 2 the parts of Lindsey*, *The Lincoln Record Society* (1962).
- King, E., 'Tenant farming and tenant farmers: the East Midlands', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 624-635.
- Kosminsky, E. A., Hilton, R. H. (ed.), and Kisch, R. (trans.), *Studies in the agrarian history of England in the thirteenth century* (Oxford, 1956).
- Kosminsky, E. A., 'The evolution of feudal rent in England from the 11th to the 15th centuries', *Past and Present*, 7 (1955), pp. 12-36.
- Kussmaul, A., *Servants in husbandry in early modern England* (Cambridge, 1981).
- Lamond, E. (ed. and trans.), *Husbandry: together with an anonymous Husbandry, Seneschauscie and Robert Grosseteste's Rules* (London, 1890).
- Langdon, J., 'The economics of horses and oxen in medieval England', *Agricultural History Review*, 2nd ser., 30 (1982), pp. 31-40.
- Lomas, R. A., 'The priory of Durham and its demesnes in the fourteenth and fifteenth centuries', *Economic History Review*, 2nd ser., 31 (1978), pp. 339-353.
- Lomas, R. A., 'A northern farm at the end of the middle ages: Elvethall manor, Durham, 1443/4-1513/14', *Northern history*, 18 (1982), pp. 26-53.
- Lopez, R. S., and Miskimin, H. A., 'The economic depression of the Renaissance', *Economic History Review*, 2nd ser., 14 (1962), pp. 408-426.
- Marx, K., Moore, S. (trans.), Aveling, E. (trans.), and Engels, F. (ed.), *Capital*, vol. 1,

- First English edition of 1887* (Marx/Engels Internet Archive),
<http://www.marxists.org/archive/marx/works/download/pdf/Capital-Volume-I.pdf>.
- Marx, K., and Engels, F. (ed. and trans.), *Wage labour and capital, the original 1891 pamphlet* (Marx/Engels Internet Archive),
<http://www.marxists.org/archive/marx/works/download/pdf/wage-labour-capital.pdf>.
- Mate, M., 'Tenant farming and tenant farmers: Kent and Sussex', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 680-703.
- Mayhew, N. J., 'Population, money supply, and the velocity of circulation in England, 1300-1700', *Economic History Review*, 2nd ser., 48 (1995), pp. 238-257.
- Miller, E., 'Introduction: land and people', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 1-33.
- Miller, E., 'Tenant farming and tenant farmers: Yorkshire and Lancashire', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 596-611.
- Miller, E., 'Tenant farming and tenant farmers: the Southern Counties', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 703-722.
- Miskimin, H. A., 'Monetary movements and market structure - force for contraction in fourteenth- and fifteenth-century England', *Journal of Economic History*, 24 (1964), pp. 470-490.
- Müller, M., 'A divided class? Peasants and peasant communities in later medieval England', *Past & Present Supplement* 2 (2007), pp. 115-131.
- Mortimer, J., *The whole art of husbandry* (London, 1716).
- Munro, J. H., 'Wage-stickiness, monetary changes, and real incomes in late-medieval England and the Low Countries, 1300-1500: did money matter?', *Research in Economic History*, 21 (2003), pp. 185-298.
- Nightingale, P., 'England and the European depression of the mid-fifteenth century', *Journal of European Economic History*, 26 (1997), pp. 631-656.
- Page, M., *The pipe roll of the bishopric of Winchester, 1301-1302, Hampshire Record series, 14* (Winchester, 1999).
- Page, M., *The pipe roll of the bishopric of Winchester, 1409-1410, Hampshire Record series, 16* (Winchester, 1999).
- Persson, K. G., 'Labour productivity in medieval agriculture: Tuscany and the Low Countries', in B. M. S. Campbell and M. Overton (eds), *Land, labour and livestock: historical studies in European agricultural productivity* (Manchester

- and New York, 1991), pp. 124-143.
- Phelps-Brown, E. H., and Hopkins, S., 'Seven centuries of building wages', *Economica*, 22 (1955), pp. 195-206.
- Phelps-Brown, E. H., and Hopkins, S., 'Seven centuries of the prices of consumables, compared with builders' wage rates', *Economica*, 23 (1956), pp. 296-314.
- Pollard, A. J., 'The north-eastern economy and the agrarian crisis of 1438-1440', *Northern History*, 25 (1989), pp. 88-105.
- Poos, L. R., *A rural society after the Black Death: Essex 1350-1525* (Cambridge, 1991).
- Postan, M. M., 'Medieval agrarian society in its prime: England', in M. M. Postan (ed.), *The agrarian life in the middle ages. The Cambridge economic history of Europe*, 1 (Cambridge, 1966, 2nd edn), pp. 548-632.
- Postan, M. M., *The famulus: the estate labourer in the 12th and 13th centuries*, *Economic History Review Supplements* 2 (1954).
- Postan, M. M., 'Some economic evidence of declining population in the later middle ages', *Economic History Review*, 2nd ser., 2 (1950), pp. 221-246.
- Postan, M. M., *The medieval economy and society: an economic history of Britain in the middle ages* (Harmondsworth and New York, 1972).
- Postan, M. M. and Titow, J. Z., 'Heriots and prices on Winchester manors,' *Economic History Review*, 2nd ser., 11 (1959), pp. 392-411.
- Postan, M. M., 'Money, population and economic change in late medieval Europe: note', *Economic History Review*, 2nd ser., 12 (1959), pp. 77-82.
- Putnam, B. H., *The enforcement of the Statutes of Labourers: during the first decade after the Black Death, 1349-1359* (Honolulu, 1908; reprinted 2002).
- Raftis, J. A., *The estates of Ramsey Abbey* (Toronto, 1957).
- Raftis, J. A., *Peasant economic development within the English manorial system* (Montreal, 1996).
- Ritchie, N., 'Labour conditions in Essex in the reign of Richard II', *Economic History Review*, 2nd ser., 4 (1934), pp. 429-451.
- Searle, E., *Lordship and community: Battle Abbey and its banlieu, 1066-1538* (Toronto, 1974).
- Shrewsbury, J. F. D., *A history of bubonic plague in the British Isles* (Cambridge, 1970).
- Smith, R. A. L., *Canterbury Cathedral Priory: a study in monastic administration* (Cambridge, 1969; 1943, 1st edn).
- Smith, R. M., 'Plagues and peoples: the long demographic cycle, 1250-1670', P. Slack and R. Ward (eds), *The peopling of Britain: the shaping of a human landscape (Linacre Lecture)* (Oxford, 2002), pp. 177-210.

- Smith, R. M., 'Geographical diversity in the resort to marriage in late medieval Europe: work, reputation, and unmarried females in the household formation systems of northern and southern Europe', in P. J. P. Goldberg (ed), *'Woman is a worthy wight': women in English society, c.1200-1500* (Stroud, 1992), pp. 16-59.
- Stone, D., 'The productivity of hired and customary labour: evidence from Wisbech Barton in the fourteenth century', *Economic History Review*, 2nd ser., 50 (1997), pp. 640-656.
- Statutes of the Realm*, vol. 1 & 2.
- Thorner, D., Kerblay, B., and Smith, R. E. F. (eds.), *A. V. Chayanov on the theory of peasant economy* (Wisconsin and Manchester, 1986).
- Thorold Rogers, J. E., *Six centuries of work and wages: the history of English labour* (London, 1886).
- Thorold Rogers, J. E., *A history of agriculture and prices in England*, v. 1-7 (1866-1902).
- Thorold Rogers, J. E., *The economic interpretation of history* (London, 1902).
- Titow, J. Z., *Winchester yields: a study in medieval agricultural productivity* (Cambridge, 1972).
- Titow, J. Z., *English rural society, 1200-1350* (London, 1969).
- Titow, J. Z., 'Evidence of weather in the account rolls of the bishopric of Winchester 1209-1350', *Economic History Review*, 2nd ser., 12 (1960), pp. 360-407.
- Tuck, J. A., 'Tenant farming and tenant farmers: the northern borders', in E. Miller (ed.), *The agrarian history of England and Wales*, vol. 3 (Cambridge, 1991), pp. 587-596.
- Tusser, T., and Mavor, W. (ed.), *Five hundred points of good husbandry 1573* (London, 1812).
- Vinogradoff, P., *Villainage in England: essays in English mediaeval history* (Oxford, 1892).
- Watkins, A., 'Cattle grazing in the forest of Arden in the later middle ages', *Agricultural History Review*, 37 (1989), pp. 12-25.
- Willis-Bund, J. W., and Page, W., (eds.), *The Victoria history of the county of Worcester*, 3 (1913).
- Willis-Bund, J. W., and Page, W., (eds.), *The Victoria history of the county of Worcester*, 4 (1924).
- Woodward, D., *Men at work: labourers and building craftsmen in the towns of northern England, 1450-1750* (Cambridge, 1995).
- Young, A., *The farmer's calendar* (London, 1809).
- Youngs, D., 'Servants and labourers on a late medieval demesne: the case of Newton, Cheshire, 1498-1520', *Agricultural History Review*, 47 (1999), pp. 145-160.

